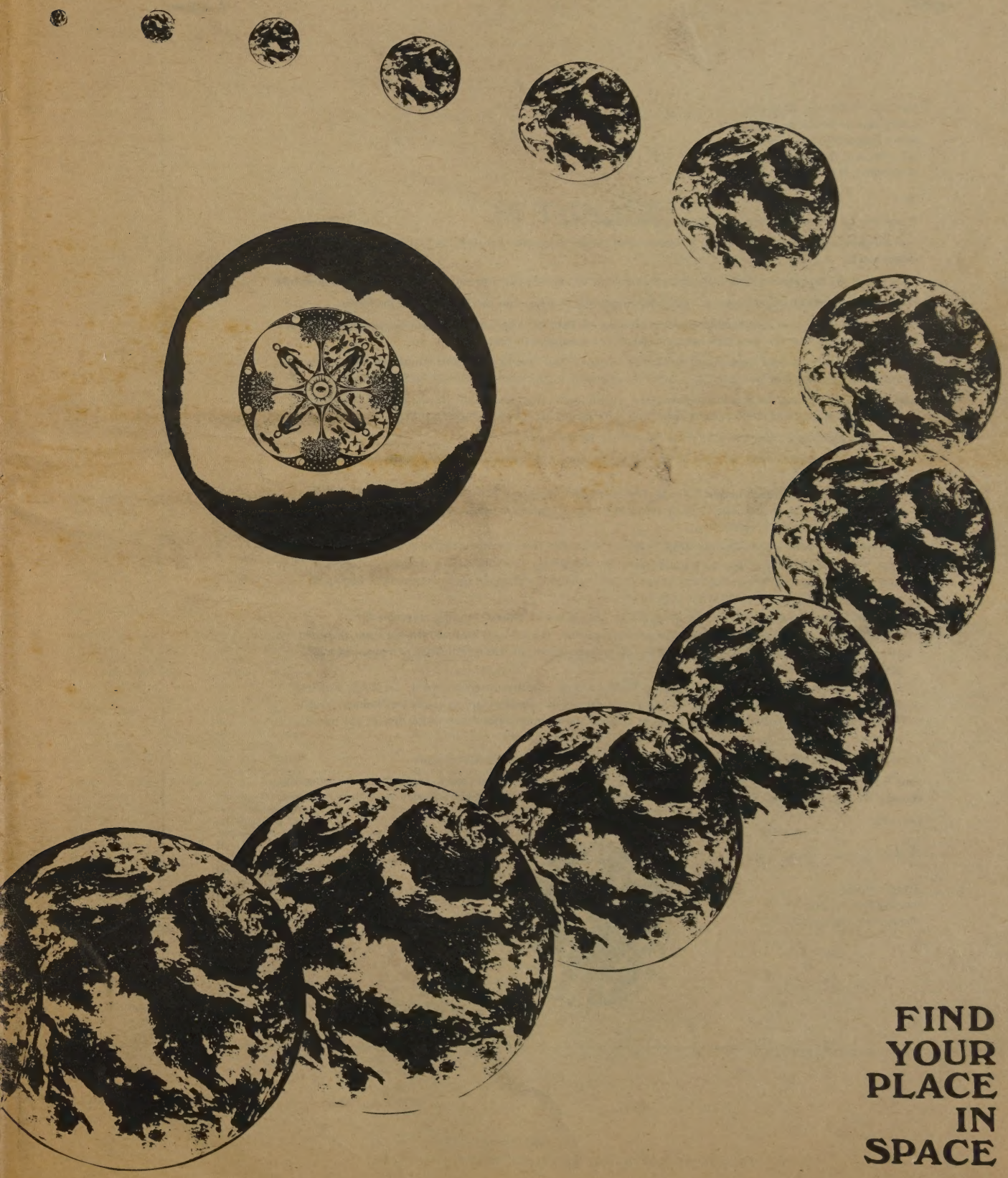
JULY

Whole Earth Catalog

$1



FIND
YOUR
PLACE
IN
SPACE

Hon. John Brademas, Chairman
Committee on Education and Labor
Select Subcommittee on Education
U.S. House of Representatives
Washington, D.C. 20515

Sir:

Thank you for the opportunity to testify before your committee.

I am delighted by the spirit behind your Environmental Quality Education Act (H.R. 14753) and depressed by every measure in it.

I'm a former ecology student, and I can report that ecology as a science is pretty boring. Definitely not for everyone.

Ecology as a movement, as a religion, is tremendously exciting, and everyone can get a piece of the fervor.

However, this voluntary mass education could be poisoned by Federal "help", as highly-intentional over-specialized application of fertilizers and perticides has damaged other natural growth processes.

In my experience, the whole apparatus of application, approval, and funding commonly introduces a dishonesty into an operation that can never be eradicated. And if the operation is educational, dishonesty is the death of it.

I see that the bill provides for preparing information specifically for mass media use. Involvement of Government with mass communications in this manner strikes me as dangerous as re-joining Church and State.

If Federal funds are to be spent on environmental matters, let them go to:

1) The space program which has given us the anti-environmental perspective to see our planet whole and alive and in hazard.

2) The World Game of Buckminster Fuller's. This computer operation is planned to perform for the Earth as NASA's computers did for Apollo 13. (Inventory resources, assess damage, compare alternative "futures" select the most promising, constantly.)

3) Contingency planning for environmental disasters comparable to long-range planning in the military.

4) A "wet" NASA to investigate the sea and treat it like Antarctica, as a fragile, trans-national environment. (Use of the oceans must be governed from a strictly environmental standpoint by an international body with a great deal more power to act than the U.N. has.)

5) Rehabilitation for ecological disaster areas such as Lake Erie and Appalachian strip mine country.

6) Ecology Action-type groups, but only for services rendered. Do not fund them, do not tax them, do not pass laws about them. When they perform a service to Government, such as investigation of environmental crimes, pay them for the information.

7) Follow-up reports by independent groups of Federal actions affecting the environment. Do this as a built-in part of initial funding. Appropriations for a dam or a war would include money to go the the National Science Foundation or the Audubon Society or whoever to study the environmental effects of the project and report on them.

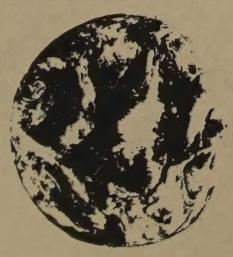
I realize that practically none of the above are the province of an Education Subcommittee.

John Holt has suggested that if we tried to teach infants to talk, they would never learn. I suspect it is the same with ecology. It must be learned. It is being learned. If you try to teach it to people, you will only teach them to hate it.

Let it be.

Stewart Brand

Stewart Brand
Whole Earth Catalog
Menlo Park, California



FUNCTION

The WHOLE EARTH CATALOG functions as an evaluation and access device. With it, the user should know better what is worth getting and where and how to do the getting.

An item is listed in the CATALOG if it is deemed:

1) *Useful as a tool,*
2) *Relevant to independent education,*
3) *High quality or low cost,*
4) *Easily available by mail.*

CATALOG listings are continually revised according to the experience and suggestions of CATALOG users and staff.

PURPOSE

We are as gods and might as well get good at it. So far remotely done power and glory--as via government, big business, formal education, church--has succeeded to the point where gross defects obscure actual gains. In response to this dilemma and to these gains a realm of intimate, personal power is developing--power of the individual to conduct his own education, find his own inspiration, shape his own environment, and share his adventure with whoever is interested. Tools that aid this process are sought and promoted by the WHOLE EARTH CATALOG.

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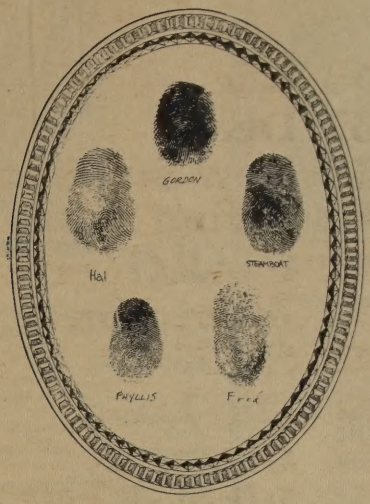

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Address orders to the supplier given with the item (unless you know of a better one; if you do, let us know).

If the price listed is not "postpaid", consult post office or express agency for cost of shipping from supplier's location to yours.

Add state sales tax if the transaction is within your state. (California sales tax is 5%)

Send check or money order with your order.

If the supplier gives you poor service, let us know. That information can be added to his review.

With some indicated items the CATALOG also will ship. There is no price difference with the service; the CATALOG gets the markup instead of the other guy, is all. Our service is fairly fast, especially for west coast orders. Bear in mind there's an inflation on. Prices are subject to rise without notice.

Generally, the closer the supplier is to you, the quicker and cheaper the shipping will be. If the item you're getting is delicate or if you are in a hurry, air express is a good deal. Anything overseas do by air, unless you want to wait a month or so for delivery.

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For formal resale, see p. 54.

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Our obligation is to CATALOG users and to ourselves to be good tools for one another.

This issue

Japan is seeing to Stewart —— we saw to this $1 Catalog. Guest editor and Whole Thing *designer was Gordon Ashby. The* T.V. Special *was produced by Doyle Phillips and Harold Nickolds. Everything else was done by*

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Spring 1970 CATALOG Corrections

Untitled Epic Poem on the History of Industrialization — p.4

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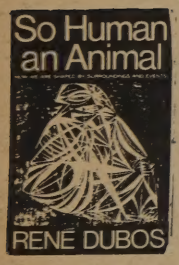

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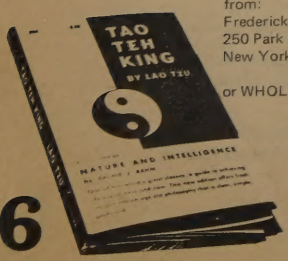

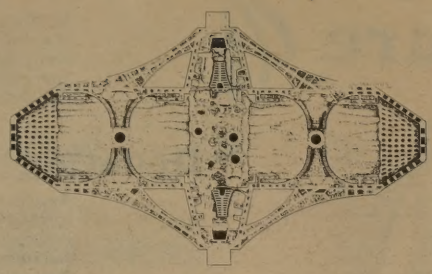

Asteromo

Arcology — p.19

Correct address for the Cosanti Foundation:

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6433 East Doubletree Ranch Road
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The Indian Tipi — p.35

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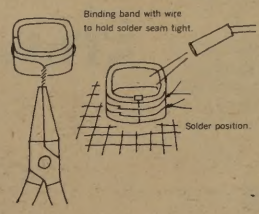

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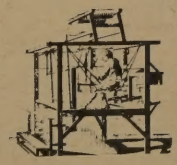

Craft and Hobby Book Service — p.51

The catalog now costs **$.50**, *which is deductible from your order if it's $3.00 or more.*

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Henley's — p.52

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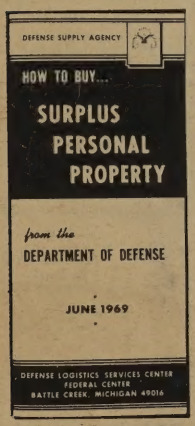

Surplus Defense Supply **p. 100**

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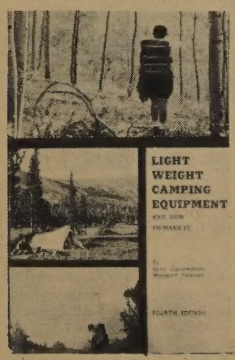


Lightweight Camping Equipment and How to Make It **p. 104**

is available now only from WHOLE EARTH CATALOG (at **$2.00** postpaid*).*

Alaska Sleeping Bag Co. **p. 106**

Their correct address is:

Alaska Sleeping Bag Co.
13150 S.W. Dawson Way
Beaverton, Oregon 97005

BD-4 Homebuilt Airplane **p. 116**

was suggested by John Shuttleworth.

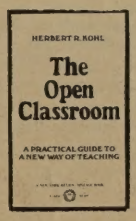
Current prices:

Complete kit with 150 Lycoming engine:
$5920.00 plus shipping

with 180 hp
$6600.00 plus shipping

Information Kits **$3.50** postpaid

from:
Bede Homebuilts
355 Richmond Road
Cleveland, Ohio 44143

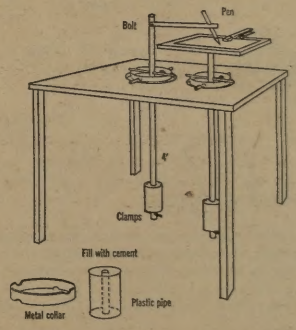


The Open Classroom **p. 127**

Correct access information is:

$1.65 postpaid

from:
Vintage Books, Inc.
201 E. 50th Street
New York, New York 10022



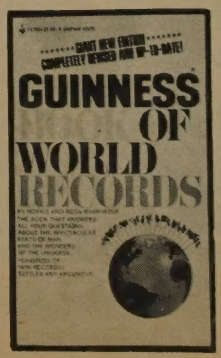
Build-it-yourself Science Laboratory **p. 128**

We omitted complete access info for this book. It is:

$5.95 postpaid

from:
Doubleday & Co., Inc.
501 Franklin Street
Garden City, L.I., New York 11531

or WHOLE EARTH CATALOG



p. 131

Guinness Book of World Records

Price went up to:

$1.25 postpaid

Bantam Books, Inc.
271 Madison Avenue
New York, New York 10016

or WHOLE EARTH CATALOG

Teachings of Don Juan: A Yaqui Way of Knowledge **p. 137**

Correct access information is:

$.95 postpaid

from:
Ballantine Books
101 Fifth Avenue
New York, New York 10003

or WHOLE EARTH CATALOG

Ce Co Co **p. 142**

The Bird and Animal Scarer Bang *is* **$85.00** F.O.B. Japan
and the Baby Duster *is* **$10.00** F.O.B. Japan.

from:
Ce Co Co
P.O. Box 8
Ibaraki City, Osaka-Fu
Japan

Fall 1969 Catalog

Sense Relaxation **p. 121**

has gone up from $2.95 to **$3.50** postpaid

from:
Collier Books
866 Third Avenue
New York, N.Y. 10022

or WHOLE EARTH CATALOG

or WHOLE EARTH CATALOG

The following titles from the Spring 1970 Catalog are now available from the Truck Store:

PAGE	TITLE
29	Architectural Graphic Standards
30	Space Enclosure Systems (No.'s. 203 and 205)
108	Handbook for the Alaskan Prospector
109	Home Tanning and Leather Making Guide

WHOLE EARTH TRUCK STORE
558 Santa Cruz Avenue
Menlo Park, CA 94025

and these titles are not *available:*

34	Desert Plants and People
90	Merck Manual
90	Merck Index

Item-related Information

On Ferro Cement p. 24

im enclosing photo copy of a house i think can be built (but the people who drew it, Mobay Chem. Co., now says it cant be done i think it can) and address for info. about ferro hull boats from Popular Science *[Sept. 1969 issue]:*

Where to get more information on ferro-cement boats

Robert Bruce Associates, Coconut Grove, Fla. 33133

Lionel Eubanks, Naval Architect, 1400 Broadway, Blue Island, Ill. 60406

E-V Associates, Inc. Subs. of Allied General, Inc., 261 S.W. 6 St., Miami, Fla. 33130

Fibersteel Co., P.O. Box 661, West Sacramento, Calif. 95691

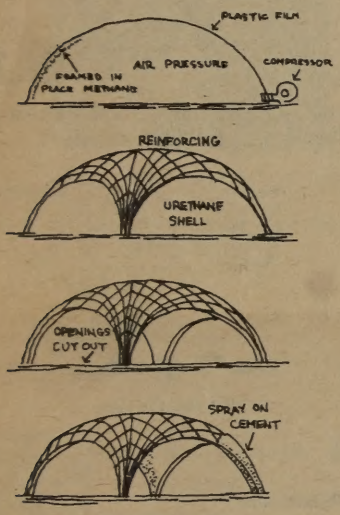
Portland Cement Association, Old Orchard Road, Skokie, Ill. 60076

Samson Marine Design Enterprises, Ltd., P.O. Box 98, Ladner, B.C., Can.

Seaferro Inc., 2455 E. Sunrise Blvd., Ft. Lauderdale, Fla. 33304

Windboats, Ltd., Wroxham, Norwich, Norfolk, NOR 032, England

Louis Guinchard, Jr.
Bronx, New York



Vegetables for Survival p. 36

Clyde Robins now offers a "Survival Garden" – especially long lifed seeds vacuum-sealed in a can for use in emergencies, etc. The catalog description:

After special treatment to prolong their life and their power to germinate with vigor, these superior seeds were immediately deposited in this sanitary container. Here their added vigor remains and their life span is greatly increased as they lie unmolested, figuratively, "Out of This World," ready to produce abundantly when the can is opened.

Seeds sealed by our method have been found very good after more than ten years. Our experience with them only goes this far.

Sealed in this container are:

4 oz. Beans	4 oz. Peas
1-1/4 oz. Beets	1/2 oz. Spinach
1/2 oz. Cabbage	1/2 oz. Squash
1/2 oz. Carrot	1/8 oz. Eastern Tomato
4 oz. Corn	1/8 oz. Western Tomato
1/2 oz. Onion	

Complete instructions for planting are included.

Enough seed to feed a small colony the essential vegetables for survival are contained in this can.

. . . Shipped anywhere in the United States . . . $3.25

from:
Clyde Robin
P.O. Box 2091
Castro Valley, CA 94546

Ashley Breakdown p. 38

I bought an Ashley 23-C on the recommendation of the Whole Earth Catalog. It was a disappointment because the top never fit down right and let heat out. Also there were many casting flaws and cracks around the edge of the top.

A friend of mine recently showed me an exchange of letters in the January Whole Earth Catalog r.e. a defective Ashley heater. My heater is usable and I'm using it – but it wasn't as good as it was reputed to be.

J. Kessel
Canyon, CA.

In the beginning of January, 1970 I came into the store and purchased an *Ashley Wood Burning Stove,* Model 25 cf. Now, approximately 3 months later I must report that the stove is "falling apart."

The Stove's "thermostatic control" totally fails to do the job it was billed to do in the Fall '69 catalog, and in the literature that accompanied the stove. Sometimes the "thermostatic control" opens properly and then never closes. Sometimes the vent never opens and must be manipulated by hand under the metal covering. As it stands now there is no effective temperature control on the stove.

The small, thin asbestos strips that line the mouth of the door have fallen off and I must place them in their spot by hand and then shut the door carefully making sure they are in place.

The stove came with no comprehensive instructions as to construction. There were different sizes of screws and I had to guess as to which went where.

I bought the stove solely on the recommendation of the Whole Earth Catalog. As it stands now, I do not and will not recommend the Ashley Stove to anyone.

I'm afraid I now look at the March Catalog with a lot more skepticism.

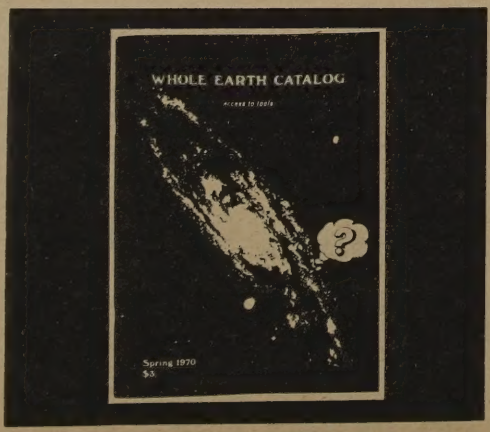
Edward B. Glazer
Felton, CA

ASHLEY STOVE WARNING

The Ashley Stove instruction booklets say to burn semi-green logs unsplit. In B.C. the most predominate firewood is alder. If you burn green hardwood, such as alder, you will have, eventually, a chimney or stack fire due to the buildup of creosote-type mung deposited by the green-wood smoke. Your stove or heater will also become coated inside with it.

Corky Evans
Cobble Hill, B.C.

Ashley Stove rep visited Whole Earth and says they have a draft equalizer to prevent this.



Boffing Rules p. 97

1. Begin by assuming a "ready position" far enough from your opponent so that an attack from him will not catch you by surprise.
2. The object of "Boffing" is to hit the person facing you anywhere on the body above a line drawn horizontally around his or her waist at hip bone level. To avoid undue irritation of the opponent, make this an imaginary line. If possible, shun being struck yourself.
3. All hits should arrive with an audible pop. Not a tick or a thudding sound, but a pop that can be heard. It is not a requirement that they sound like a field gun.
4. Hits are best made laterally with the tip ten inches of the "boffer." To delineate this section a wide rubber band may be applied.
5. As soon as you or your adversary has been hit or if there is reason to believe a hit has been made, play should be suspended and dialog begun in an effort to determine what did happen.
6. All hits, on arrival should be promptly acknowledged aloud. "I am hit" or its equivalent is correct and proper. If your partner does not do so, remind him or her of this rule.
7. Thrusts with the point are invalid. They do not produce a popping sound and they are hard on the shaft. We consider them a conspiratorial and illegal act.
8. Sometimes both players are hit. In such cases only the one arriving audibly first is scored. When no audible difference in time can be detected, one point is scored against each.
9. Hits arriving on the mitt or armed hand are not counted. Those on the unarmed hand do count and it is well to keep yours out of the way. On the left hip is a good place if you are right handed.
10. Games may be "Boffed" to 5, 7, 11, or 21 depending on your inclination or endurance. Games to 100 are frowned upon if one or more players are over 90.
11. The sharp lower edge of the "Boffer" is the parrying section. It is preferable to present this edge (when parrying) to your opponent's incoming weapon. A parried hit can thus be distinguished from a valid hit by its dull thudding sound.
12. A knuckle guard, goggles and ear protectors are furnished. If you "Boff" without them you will be sorry. They are included to keep you from getting your ears knocked off.

Sincerely –– the management

Jack Nottingham
The Ionized Ski Pole &
Old Fashioned Product Mfg. Co.
190 Emmet Ct.
San Francisco, CA 94110

Boffer Gripe

It is a criminal act to sell Boffers for eleven dollars. Everyone needs them; not everyone can afford to buy a set each month. It's fine if you want to be Free Enterprise, Vast Profits, and Capitalist Pig, but you don't have to carry The American Way to an extreme and produce shoddy merchandise as well.

Boffers break. They have, in ten days at our school (which houses a small and only normally aggressive population), broken off to swords only half the original size, the handles have chipped and cracked to the point where they are being held together by masking tape, and we are distraught because we now perceive no way for our school to continue without Boffers; they have become indispensable. It is just plain NO FAIR to make indispensable tools that are not durable and/or cheap.

Sara Miles
Blauvelt, N.Y.

Procion Dyes Revisited; Go Elsewhere p. 48

I had used your catalog as a source finder for dyes and came across Mr. Glen Black's name as a place (person) where I could get Procion dye used in dyeing cloth. I called Mr. Black on the phone and asked him what it would cost me to purchase 8 lbs of dye from him for our store. He told me the price would be the list price of $.75 per ounce. When I asked if there was any way that we could get a trade discount he replied that there wasn't. I thought this was a little strange not allowing a discount on quantity but since I was completely naive as to the dye industry and its ways I ordered the dye at Mr. Black's prices only to find out that there were many other places that dye could be bought cheaper. I have now ordered the dye from the manufacturer and hope to sell it much more cheaply than the $.75 per ounce price.

[Manufacturer's address:
I.C.I. Organics, Inc.
55 Canal Street
Providence, R.I. 02901
Inquire for prices.]

Dale Sidebottom
Whole Earth Access Co.
Berkeley, CA

Try Tintex

Larry Koenigsberg's letter on pg. 7 of the January Supplement concerning Rit dyes are my sentiments exactly. A while back I dyed a T-shirt in Rit dyes. The colours were O.K. till I washed it and wow did it ever fade. I've found Tintex dyes to be more reliable – they hold their colour when washed and are brighter to begin with. They work great on cottons (even if it's stay press material), silks and linen. Tintex dyes are quite a bit cheaper than the Procion dyes Larry suggested (35¢ for a 2-1/8 oz. box), and due to the fact dyeing has become so popular they now come in a wide variety of brilliant colours (now one doesn't have to mix colours as one had to produce brighter colours). This saves time and money as well.

There are some of the new colours that I've found are exceedingly good:

Butterscotch
Tiger Lily – a brilliant orange
Cranberry Red
Plum – a beautiful purple

If you don't want your colours to run or fade when you wash them put them in vinegar or very salty water before you wash them. I've found it helps a great deal.

Marc Silberman
Indianapolis, Indiana

New Alaya Catalog p. 136

Alaya Stitchery, makers of Meditation Cushions and Mats, have a new catalog – still free, as listed in the Spring 1970 Whole Earth Catalog, but they ask that you send 10¢ along to cover postage.

from:
Alaya Stitchery
455 14th Avenue
San Francisco, CA 94103

Leclerc Looms p. 55

Leclerc Loom has a warehouse/office in New York City. It's run by some of the nicest people you would ever want to meet. They will be glad to talk to you about anything to do with looms and also tell you where you can take lessons of loom weaving. They sell whole looms as well as parts. Their address is

Leclerc Looms
312 East 23rd Street
New York City, N.Y.

Marc Silberman
Indianapolis, Indiana

For Happy East Coast Babies p. 86

I have information regarding another supplier of the *Happy Baby Food Grinder.* It would be beneficial to East Coast readers. It is as follows:

Bowland-Jacobs Manufacturing Co.
9 Oakdale Road
Spring Valley, Illinois 61362

Mrs. William E. Kelley
Hoosick Falls, N.Y.

Bike Advice p. 111

Your 'bicycle page' came at just the right time as I had just decided to look into the purchase of a really good bicycle, having ridden a medium quality/price one for about a year, back and forth to work.

The page was helpful – however – a couple of things seem to me a bit misleading. First off the *Reynolds* 531 tubing bit. *Reynolds* does not make frames, only tubing. There are, apparently, three or four makes of tubing of equal quality – *Columbus* is one, I'm not sure of the other makes. Apparently all top quality light weight bicycles use either *Reynolds, Columbus* or one of the other brands and there is usually a decal on the bike stating this.

From what I could find out an outfit called *Campagnolo* in Italy apparently has a corner on making top quality components for bicycles. They make pedals ($20 per pair), all the bearings, hubs, derailleurs – about everything but rims, spokes tires and seats. All the really top quality bikes use all *Campagnolo* components, so the difference is in the frame – the finish on it, the angles, etc. I've been told that, blindfolded, 99% of the bicycle riders couldn't tell one from the other.

I wrote to all the places listed on the 'bicycle page' and most (except *Schwinn*) were slow in answering, or didn't bother to answer at all. Judging by the description of how bicycles are shipped, and having watched one set up for me I would advise anyone against buying by mail. The mail-order bikes are, seemingly, good quality, but the prices are no bargain. And there are lots of little things that a dealer handling top quality bikes will change to suit the customer. Such things as the length of the stem, type of rim and weight of tire, etc. – a fair number of things that can make the difference between whether the machine really fits the rider and suits the kind of use he is going to give it or not.

Dis-Unity p. 88

Unity was given a hearty recommendation in the Fall 1969 catalog.

I am completely and utterly disgusted with Unity. I received a damaged shipment three weeks ago, wrote Unity, and still have not heard a peep out of them. I would be thankful if I could get half my money back. At the present time it looks like I am stuck with a useless piece of junk.

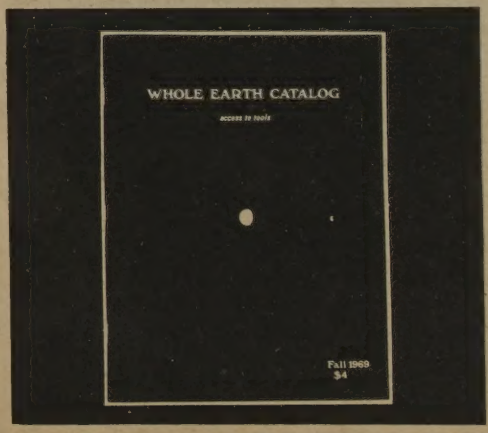
To top it all off, Unity's prices are really not so great. They are only slightly lower than what you would find in a regular discount house, and by the time you add shipping, insurance, anguish, etc., you are way behind.

I hate you, Unity Buying Service!!!

Andrew Hyams
Teaneck, N.J.

On May 12, 1970 I sent a check for five dollars membership to Unity Buying Service. I still haven't received the catalogue they're supposed to send. Perhaps you can check on this. According to Mt. Vernon New York "Directory Assistance" there is no phone listed for them. I am writing a reminder to them to go out with this letter. Help, please. My main interest in them is for recording and projecting equipment.

Natalie B. Goldman
New York, N.Y.



• Fall 1969 CATALOG •

it. I have yet to receive [illegible]
Burton D. Dolph, the signer of the form letter.

Further: in the January 1969 issue of *Consumers Reports,* on page 48 *Unity Buying Service* is mentioned. A reader inquired if *Unity Buying Service* is connected with *Consumer Reports* (as *U.B.S.* says it is).

Of course *CR* denies this, and goes on to say that *UBS* has only a Post Office Box number, and has declined to tell *CU* where it is actually located. And that *UBS* has also declined to respond to inquiries from the local and national *Better Business Bureau.*

This to me isn't saying a hell-uva lot for *Unity Buying Service.*

Are there any known persons who have actually bought through them, received what they wanted, and at a savings?

ALSO, if the *WEC* has been lowered to $3.00, why did I get a renewal card advertising six Catalogs 2 big 4 little ones, July 1970 – Spring 1970 for $8.00? That's what the price has always been, for the same amount of catalogs. Where is the savings?

Keep on Trucking

Arnold M. Scher
Palo Alto, CA

For a subscription starting in Fall 1969 you get one Fall 1969 CATALOG – $4, one Spring 1970 CATALOG – $3, and four $1 Catalogs – $4. Adds up to $11 worth for $8.

If you started with the Spring 1970 Catalog, you'll get two big CATALOGS – $6 and 4 $1 Catalogs – $4. That's $10 worth for $8.

See the subscription form (p. 54) for more on subscription rates.

Groovey People are the Ultimate Pollutant

Art, religion, politics might be tools, okay. But Earth Peoples Park is not a tool. It is a guaranteed ecological disaster created by bigtime media superfreaks who are adept at creating disasters. (See Haight-Ashbury.) And what do you have against Queen Charlotte Island? You know advertizing it in the Catalog will only get lots of groovey people up there to rip off the Indians and fuck up the ecosystem. Recognize that man is the ultimate pollutant.

Krishna Echofreak

ALTERNATIVE ACTION

Have heard a lot lately about ecology and pollution I offer you a few thoughts. A country pays out its ecology and resources in order to have industry and technology. An underdeveloped nation will generally allow pollution and destruction of the ecology while achieving a higher standard of living. If you're starving you don't care who saves trees or why. More people alive and less starvation and disease is a good thing, even if it costs. Human life is worth more. (This touches on a further point which I will get to.) People don't care until a particular level of living is reached when enough people have time, money, when they are affluent. The directions then left to them are 1. Level off, put out no more garbage and begin redeeming what's already out here. 2. Cut down on industry and actually close factories and begin a controlled form of underdevelopment. 3. Pay out the entire environment for the technological capability to leave it and move somewhere new and start again. Certain disadvantages occur in all cases. Someone gets hurt and the nature of our system demands that low man gets it. The same people begin consistently losing if they haven't already. So, society won't take care of us all. Usually you either split or stayed but now the global village is catching up. We will soon have nowhere to split to. So revolution. Well, that's not really any better. Revolutions only change the people who are winning and losing. That is if they're good revolutions. As ORO pointed out individual freedom must give way for the stability of the society. If you deviate beyond a certain point you are out. However those people who eventually shape the society and cause it to progress are also out. Creative people deviate because of the forces that make them creative in the first place. Colin Wilson's **Outsider** *made a nice picture of this. Richard Lindner (***Rebel Without a Cause***) also pointed out that creative people are related to criminal psychopaths. What makes you one and not the other is still a mystery. So then we all get together. Fine except who wants to be in the same place with the Boston Strangler? Who lives? Who dies? Then too the society that is left, the conformist, stabile one will stagnate. Whether they watch the other or not is meaningless because the two groups must interact for each others mutual interest. Society needs the stability and the instability together. If separated they both begin falling down. What I seem to have arrived at here is the idea of many outlaw areas. Each outlaw to the rest by greater and lesser degrees. With enough fluctuation this could be kept up as long as possible. Once travel bans, and secret police and armies got going we'd be right back where we started. War mongers, money grubers, power grabbers, etc. will all be around and then we start shooting at each other. Like it or not we seem to have one of the best worlds around. The fact that it's in trouble is nothing. It would be in trouble anyway. What matters is the degree of trouble we're in. So for now we've got to keep bucking the system confident that our children will have a different system to buck.*

As for the point I mentioned earlier I refer to Biafra and the Biafran children. (My politics in this matter on neither side.) They have starved a lot and now those who survive will be permanently retarded, have weak hearts, various internal disorders, and be far more prone to disease than usual. These children will be a burden to the nation and the people of Nigeria because of this. Are they really better off alive? I'm not really prepared to answer that. I can't believe anyone is, not even the children. They will live now, but how well? This is one specific case but there are literally millions of starving children who will be saved from death but not from damage. Are we really right?

As to the three alternatives preparation has already begun to move people to other planets. I'm not talking about government work either. Several people are planning for it now. Perhaps if this all ends soon there will indeed be someone to come around and sweep up.

yours for Mars in 99 George E. Thompson
Lafayette, Indiana

REACTION

Recent issue calls for – almost – all out war on the Hippies claiming Angloes have no right to be here – it's Chicano land, etc. (they make no reference to the fact that this is Indian land and the Chicanos too are foreigners).

Things are "up-tight" – we see our own impurities manifest in the actions of others – houses burned, long hairs attacked, shot, etc. – Joe Bonner and Steve Durkee were attacked in Taos last week – cut heads (no pun intended), smashed windshield. A bridge burning in Pilar left several families stranded on the other side of the Rio Grande – 1/2 the families being residents of the "straight" community. A Taos doctor with Hippie patients had his car tires slashed and gas tank sugared.

Divine Mother dances on and we taste a bit of the hate that sweeps this plane of karmic illusion.

At the Blessed Feet of Rama all manner of being is well.

Shanti

Tom Duckworth
Embudo, New Mexico

Social Liberation

Dear Mr. Brand,

I recently read the Jay Bonner staff gripe on page 47 of the January supplement. I can understand your personal desire in developing the Catalog to provide access to tools to further a particular personal lifestyle. Were you to stick to the individual tools which we all find so helpful and not comment upon the purpose of this lifestyle nor attempt to understand the situation that creates the desire for a back to nature isolationism (and don't litter on the way), then I could hardly complain. However, you are in fact making such statements by including the works cited in column two of Bonner's letter plus such items as *The View from the Barrio, The Politics of the Barrios of Venezuela*, What if we run out of plastic ore?, Mountain Fantasy, Liferaft Earth, Earth People's Park, etc.

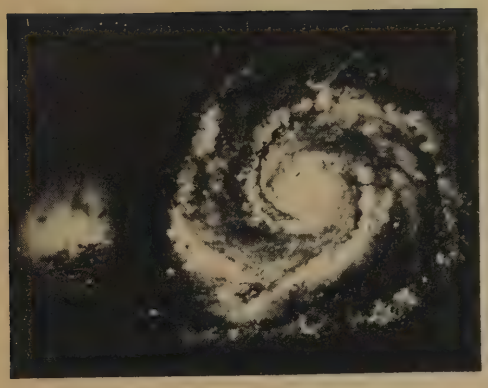
If you are going to introduce your readers to these greater problems of sociology, ecology, and politics, you cannot expect them to acquire a more encompassing consciousness unless you introduce them to the most significant process of present historical dynamics, i.e., inductrialization as manifested in capitalism and socialism. This is a process that is not about to rate the problem of ecological preservation above that of increasing economic power and will continue to befuddle Arthur Godfreys as to why "our bureaucrats are dragging their feet."

To expect personal liberation without social liberation is callousness, and I can only admire a member of the younger generation such as Jay Bonner for perceiving this characteristic of the Catalog. Your response to him betrays your misunderstandings of American capitalism, why it needs continued repression of the Third World to maintain its hegemony, and why what you consider to be your radical response to its direction, the Catalog, is in fact not about to rock the boat at all and thus can have as retaining subscribers some of America's most powerful capitalists.

Bradley H. Dowden
Los Altos, CA

There are a lot of books, periodicals, and soapboxes going on the subject of social liberation – some of them damned good. I figure it's a waste of usefulness for us to try to re-hash their work further. We may be useful by approaching the same problems from a slightly different direction.

Note: The Whole Earth Catalog is so named in order to promote the visual image of the planet, not to suggest that we are comprehensive. One good reason for stopping the Catalog in '71 is that people keep levering us toward being some kind of empire monopoly or other cure-all. No, thank you. – S.B.



World Game Note

There's something funny going on round here.

Right in the middle of the March one dollar issue is Gene Youngblood's article on Fuller's World Game. It's exciting, inspiring even. Here are all these guys with all the best intentions about to wire up the globe so that by the year 2000 (if not sooner) everybody will have enough of everything. He really makes you feel like it's within reach, once we get off the merry-go-round of local politics. Though NASA has promised $12 million, how much more will Fuller get when the feds discover that he really intends to put them out of business?

Anyway, once the world is all wired up, everybody will live at least as well as we do now. All the people, that is.

Right at the end of Youngblood's piece you slip into the Ecology section. The first thing to hit my eye was the quote from Lynn White, "The victory of Christianity over paganism was the greatest psychic revolution in the history of our culture . . . Christianity . . . not only established a dualism of man and nature but also insisted that it is God's will that man exploit nature for his proper ends. . ."

But what do you call wiring up the earth? Far out. Maybe Fuller is the first of the really big Christians.

Are we to total Whole Earth technocrats, insuring only our own survival? (If you read closely you will note that Youngblood — like Fuller -- talks about minerals and such, and makes no mention of organic things except what people can eat.)

Or are we to be Ecology Action pagans, trying to scramble back to a sense of union with the planet that created us?

The ecology people say we gotta change our whole culture, or we won't survive. The Fuller people say we've only got to make our culture really efficient not only to survive but to get a whole lot better.

You know, the problem goes a lot deeper than just, will we survive, and how? No doubt we can with Fuller mold and shape and wire the earth toward the compleate human habitation. We will change and even destroy a lot of things, but Fuller believes we have the thrust of evolution on our side, and that people are really a lot more important than the brown pelican (to use an unfair example).

But it's not just a matter of "Christian American saying can't. I need the money." Money really isn't important, especially in America. How much did we spend just to have a couple of guys walk on the moon, for "the spirit of exploration", for "national prestige"? How much do we pump daily into Vietnam, for "the defense of democracy", even as we search for "an honorable peace"? We struggle and fight for abstract ideas, and the money really doesn't matter.

Now Fuller obviously has the best technique for survival, given the human desire to avoid changing basic ideas. Fuller is a catalogue of 1700 years of Christian ideas. Up against this, the ecology freaks really have no chance, because all they are talking about is survival, too.

But ecology really demands another psychic revolution. Like you say, a holy war. We need to believe we are one with the whole earth. And not just to survive, but because we really are. And that means, at least in the beginning, a new religion, a new faith.

Only through belief do you really change people's heads. And right now we believe in rationalism, in the technical method, in the validity of abstract numbers. Even the piece about the sacred earthworm is full of the scientific things earthworms are and do, like 30 tons of this, 1800 species of that, 15 years of something else.

Somewhere I read an old Chinese parable about a farmer who refused to take the technologic step of making a waterwheel to water his crops, even though he knew how. The rhythms and cycles of his life were the important things. He would not, he said, subject his body to a machine merely for the gain of efficiency. In medieval China this was the highest wisdom.

The distance between that view of life and our own is almost unbridgable, but it is that step ecology asks us to make. Can we make it? In thirty years?

So you have an answer? I don't. I'm afraid we had better light our candles to St. Buckminster.

Cary James
Mill Valley, CA

Chinese parable vs. Fuller is a prime trap, which you're welcome to. I figure our best chance lies in ecological pagans, and the world game, and critical letters, and the rest of it. So long as stuff is getting tried, and the stuff knows about each other, and there's lots of different stuff. Once it's in the world, evolution can sort it out. — S.B.

Biodegradable Detergents and Phosphates

All biodegradable detergents are not "GOOD", "PURE", etc. Amway products decompose quickly but have a high phosphate content (Amway Trizyne 52.5%, SA8 36.5%). Detergents contain phosphate compounds. Phosphates over-fertilize water. Algae prospers. Top algae smothers bottom algae. Bottom algae rots and consumes oxygen in order to decompose. Algae taking more oxygen out of water than returning. Algae, plants, fish and eventually water dies. Algae produces 90% of the earth's oxygen. In 7 years or so, no more *oxygen* (Ehrlich).

What to do. Shaklee organic products are the best that I know of. They contain 0.1 parts per million phosphate. And they completely decompose in 7 days under the worst conditions. It is only sold through private distributors. To find distributors or to become one write: SHAKLEE PRODUCTS; 2035 National Avenue; P.O. Box 3625; Hayward, California 94544. In Portland, distributors are listed in the yellow pages under cleaning compounds.

WHAT ELSE TO DO: Write senators and congressmen. (Get out petitions.) Ask them to pass legislation making it illegal to sell/use, distribute, etc., any detergent that will not completely decompose in 7 days and that has more than 1% phosphate compounds. The detergent companies can meet these standards but it is cheaper etc. . . . . .

Kit Whitney
Portland, Oregon

UNFOWLING THE NEST

Hark the crises of waste water disposal . . . and Behold this ecologically and biologically sound contraption:

"The Microphone Sewage Treatment System." This is a self contained treatment plant designed to replace the septic tank for a small installation such as home(s), school, motel, small industry, etc. It uses redwood bark as a substrate for biological degradation of suspended and dissolved wastes, i.e., its three chambers perform the equivalent of primary and secondary treatment giving an effluent usable for agriculture, etc.

Being tried by
Joe Brennan
Moss Beach, CA

Information available from the manufacturer:

Hilfiker Inc.
3900 Broadway
P.O. Drawer L
Eureka, CA 95501

Looks interesting, but is this yet another reason to fell the redwoods? — ed.

Maximum Concern for Our Biosphere

In response to Jeffrey Atwood's letter, and that of Philip Kienholz, in the March issue, I would like to point out that we have begun to produce an effective machine dishwashing compound which is totally biodegradable and contains no phosphates. Our compound contains sodium carbonate (old-fashioned washing soda), metasilicates and 2% of a low-foam, totally biodegradable detergent. We are offering this product for sale, along with nine other ecologically sane cleaning products. However, it is our policy to make our formulas available, free of charge, to anyone who wishes to produce his own cleaning products.

MCB Products, a new San Francisco enterprise, is offering ecologically sane cleaning products for sale. All our products are biodegradable. They contain no phosphates, no perfumes, no bleaches, no preservatives and no clarifying agents. Some of our cleaners are all vegetable in composition (where this is practical for the cleaning purpose). We do not market any product whose manufacture involves contact with heavy metals or other potentially toxic substances.

Our labels clearly indicate every ingredient in every product and our formulas are available to anyone on request. If there is sufficient demand, we will offer for sale, in bulk, ingredients from which people can manufacture their own cleaning products.

Our products may be purchased in case lots packaged (24 packages per case) or in bulk (100-500 pounds in shipping drums). Write us for price lists.

Sharon Fain
MCB Products
Maximum Concern
for our Biosphere
P.O. Box 24262
San Francisco, CA 94124

What about Amway?

Thanks to Philip Kienholz for sending in the list on phosphate contents in detergents (Supplement — March 1970). You should print in big letters in the catalog advice to readers not to use Amway. A little knowledge — thinking "biodegradable" means it's ecologically sound — is dangerous. I discovered from the list why washing soda is better to use with soap flakes than water softener and Snowy Bleach. I knew the soap flake—washing soda combination had been recommended, but I didn't know why.

Suzanne Lainson
Hastings, Nebraska

Sure, Amway is a distributor, but local and hard (for me it took a letter and several phone calls and most of the time I got sales pitches for their other products . . . .) to find sometimes. Better to go to good old Sears, who carries a biodegradable detergent (11F 9366C — 20 lb box for 4.17, and this is concentrated) or check in the local market, and look very carefully for the word biodegradable.

And then I think you should tell the folks what it means: Biodegradable means that the molecules break down quickly in water, and it doesn't use up oxygen in the rivers as much as ordinary detergents who (dear me, which) take longer to break down. Course, there are fast acting and slower acting biodegradables, but I'll let some biologist take over . . . . .

Also, University of Toronto is doing some work on a phosphorous free soap, and some like it, some say it doesn't clean as well. Phosphorous and nitrogen are the things algae and bacteria love, and until you eliminate this excess, you are still polluting.

In short, tell your people Amway is nice, Sears is most of the time easier to get the stuff, but GET IT AND USE IT.

And write encouraging letters to Toronto. Biodegradable is not the final answer.

Alexandra Van Gelder
Storrs, Connecticut

i was shocked out of using Amway's laundry detergent by finding in Philip Kienholz's letter (March WEC, p. 10) their product listed at top of list of phosphate-containing products (bad for fish and aquatic plants) with 52.5%.

on more careful consideration, i found that their chief laundry detergent, Amway S-A-8, is half-way down the list with only 36.5%, and remembered that you use only half as much of it in the washer as you do of popularly-advertised brands.

so effectively the phosphate content compares as 18.25%; not too bad.

phosphate-free Amway L.O.C. can be used for laundry but they say that while it does clean clothes, after repeated washing "some greying may occur".

Carol Maddox
Cape May Courthouse, N.J.

The Amway Corporation registers its phosphate percentage in its Trizyme washing detergent as 34.3%, which brings it down to 8.6% per wash load (Trizyme is concentrated, you use about 1/4 cup). However, the difference between this figure and the number listed in your last supplement could be because Amway uses percentage weight and the list uses percentage volume, or vice versa. Anyway, you should determine the actual figure because if the Amway phosphate percentage is below 10% it would be the best low-phosphate, biodegradable detergent manufactured.

Jeffrey T. Atwood
W. Hartford, Connecticut

THREE LAWS

EVERYTHING IS CONNECTED TO EVERYTHING

EVERYTHING'S GOT TO GO SOMEWHERE

THERE'S NO SUCH THING AS A FREE LUNCH

SWEDISH COMPOSTER

Looks like it could be made as a do-it-yourself kind of kit — the inventor is looking for someone in U.S. to manufacture — any suggestions?

(Suggested by Ernest Rimerman)

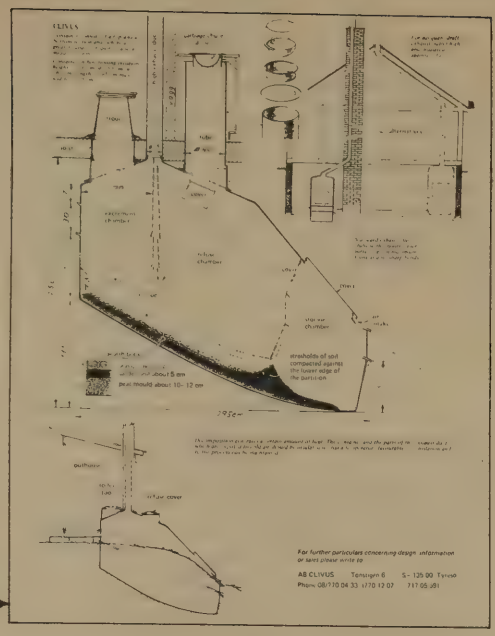
CLIVUS IS NOT TO BE CONNECTED TO WATER OR SEWER SYSTEMS

The waste decomposes added by the supply of air and the inherent moisture (urine, wet garbage, etc.). Water vapour and carbon dioxide rise through the exhaust duct after leaving the waste mass which decreases considerably in volume and moves slowly towards the lowest chamber where the final products (soil, humus, nutritive salts) accumulate. They can be utilized as fertilizer — normally first after about 2 years and with intervals e.g. of 1—2 years.

Clivus is designed to meet the need for convenience and a hygienic and natural means of diminishing household waste and converting remains to soil restorer on the site.

A household with Clivus needs drainage for bath, dish and laundry water only (purification separately by method suited to local conditions — information concerning valid regulations can be obtained from the health authorities). Since Clivus takes kitchen waste normally poured down the drain, the sewer is relieved of such matter.

Through purification on site: transportation (vehicles, sewers, etc.) of refuse can be reduced or eliminated; outflow and spreading of contaminated matter in ground and water is prevented; the quantity of pure water used solely for the transport of excrement and refuse in the sewage network can be put to better use.



CUT THIS OUT AND USE IT.

Where to Get Compost Makers

I suggest that the WHOLE EARTH CATALOG list and describe the various Shredder/Grinders used for composting. Attached is a list which I have compiled of several manufacturers who advertize in the magazine *Organic Gardening and Farming.*

List of Companies Manufacturing Shredder-Grinders

Amerind-MacKissic Incorporated
Box 111, Dept. O
Parker Ford, Penna. 19457

California-McCulloch Equipment Co.
Box 3068
Torrance, California 90510

Gilson Brothers Company
P.O. Box 152, Dept. C
Plymouth, Wisconsin 53073

Kemp Company
602 Kemp Bldg.
Erie, Penn. 16512

Red Cross Mfg. Corp.
Bluffton, Indiana 46714

The Roto-Hoe Company
Dept. 2
Newbuty, Ohio 44065

W-W Grinder Corp.
2957B No. Market
Wichita, Kansas 67219

James G. Hupp
Orinda, CA

39 WAYS TO SAVE THE EARTH.

1. Don't use colored facial tissues, paper towels, or toilet paper. The paper dissolves properly in water, but the dye forms a residue.
2. If you accumulate coat hangers, don't junk them, return them to the cleaner. Boycott cleaners who won't accept them.
3. Use the containers that disintegrate readily. Glass bottles don't decompose. Bottles made of polyvinyl chloride (PVC) give off lethal hydrochloric acid when incinerated. (That's the soft plastic many liquid household cleansers, shampoos and mouthwashes come in. Don't confuse it with stiffer polystyrene plastic, used mainly for powders.) The Food and Drug Administration has now approved PVC for food packaging too. Don't buy it. Use decomposable — "Biodegradable" — pasteboard, cardboard, or paper containers instead. If you can't, at least re-employ non-decomposable bottles; don't junk them after one use.
4. Don't buy non-returnable containers. When you go to the super market for milk, take an empty jug with you. At the check-out stand pour milk from the disposable carton into your recycled jug, give the empty "disposable" carton to the checker, and explain that you must put action on the store because you can't stop buying milk and this is the only way the individual can reach the companies which the store orders from. Hold the aluminum can purchase to a minimum unless you are willing to recycle the aluminum. In Santa Fe the address for recycling is Capitol Metals, 4008 Cerrillos Road, 983-2726. They will buy aluminum at 10¢ per pound if the cans are delivered in gunny sacks, crushed; also old aluminum TV dinner trays, old aluminum lawn chairs. This way the metal can be reused.
5. At the gas station, don't let the attendant "top off" your gas tank; this means waste and polluting spillage. The pump should shut off mechanically at the proper amount. (True too for motorboats.)
6. If you smoke filter tip cigarettes, don't flush them down the toilet. They'll ruin your plumbing and clog up pumps at the sewage treatment plant. They're practically indestructible. Put them in the garbage.
7. Stop smoking.
8. Stop littering. Now. If you see a litterbug, object very politely ("Excuse me sir, I think you dropped something.").
9. If you are a home gardener, make sure fertilizer is worked deep into soil — don't hose it off into the water system. Phosphates (a key ingredient) cause lake and river algae to proliferate wildly. Convince nurseries to provide information and sell publications on the control of pests without pesticides rather than selling pesticides. Encourage them to hire someone part-time to work as a pest-control consultant. Boycott and picket uncooperative stores.
10. Don't buy or use DDT, DDD, or any other chlorinated hydrocarbon pesticides. The sale of DDT is now illegal in New Nexico. Do not dispose of DDT or any other poisons down the toilet, in the garbage can, or into a home incinerator or the fireplace. Each of these results in the release of the poison into the environment. Local sanitation officials should be contacted for instructions on proper disposal methods. Make sure these officials don't just dump it in the garbage themselves. If your garden has water, sun, shade, and fertilizer, it shouldn't need pesticides at all. If you must spray, use natural poisons extracted from plants —— like nicotine sulfate, rotenone, pyrethrum.
11. To reduce noise, buy a heavy-duty plastic garbage can instead of a metal one. Or sturdy plastic bags, if you can afford them. They're odorproof, neater, lighter.
12. When you see a junked car, report it to your local Sanitation Department. If they don't care, scream until someone does.
13. If you don't really need a car, don't buy a car. Motor vehicles contribute a good half of this country's pollution. Better walk or bicycle. Better for you too.
14. If you have to car-commute, don't chug exhaust into the air just for yourself. Form a car pool. Four people in one car put out a quarter the carbon monoxide of four cars.
15. Better yet, take a bus to work. Or a train. Per passenger-mile, they pollute air much less than cars. Support mass transit.
16. If you still think you need a car of your own, make sure it burns fuel efficiently (i.e. rates high in mpg). Get a low horsepower minimachine for the city, a monster only for lots of freeway driving.
17. Bug gasoline manufacturers to get the lead out. Tetraethyl lead additives are put in gas to hype an engine's performance; they can build up in your body to a lethal dose. Indiana Standard Oil Co. has a lead-free fuel now (AMOCO); Atlantic Richfield has announced they'll introduce one if all car manufacturers rework engines to make them burn up every breath of fuel, so lead's not needed. One Detroit leader has already promised new engines on all 1971 models. Pester the others. (Lead, by the way, chews up metal —— including new antipollution catalytic mufflers.)
18. If bagged garbage overflows your trashcans, shake it out of bags directly into the can and tromp it down to compact it.
19. Burning leaves or garbage is already illegal in many towns. Don't do it. Dispose of it some other way.
20. If you see any oily sulphurous black smoke coming out of chimneys, report it to the Sanitation Department or Air Pollution Board.
21. There's only so much water. Don't leave it running. If it has to be recycled too fast, treatment plants can't purify it properly.
22. Measure detergents carefully. If you follow manufacturers' instructions, you'll help cut down a third of all detergent water pollution.
23. Since the prime offender in detergent pollution is not suds but phosphates (which encourage algae growth), demand to know how much phosphate is in the detergent you're buying. Write the manufacturer, newspapers, Congressmen, the FDA. Until they let you know, use an unphosphated, nondetergent soap. (Bubble baths, you may be happy to know, do not cause detergent pollution.)
24. Never flush away what you can put in the garbage. Especially unsuspected organic cloggers like cooking fat (give it to the birds), coffee grounds or tea leaves (gardeners dote on them).
25. Drain oil from power lawn mowers or snowplows into a container and dispose of it, don't hose it into the sewer system.
26. Avoid disposable diapers if possible. They may clog plumbing and septic tanks.
27. If you see something wrong and don't know who to contact, bombard newspapers, TV and radio stations with letters. Get friends to join in. Media will help with the message if you're getting nowhere in normal channels. Remember: publicity hurts polluters.
28. Protest the economic idiocy of the SST, write the President. Today's Boeing 747 can already move more people farther without ear-shattering sonic booms.
29. Help get antipollution ideas into kids' heads. If you're a teacher, a Scout leader, a camp counslor, a summer playground assistant, teach children about litter, conservation, noise . . . about being considerate, which is what it all comes down to.
30. If you're in a relatively rural area, save vegetable wastes (sawdust, corn husks, cardboard, table scraps, et al.) in a compost heap instead of throwing them out. Eventually you can spread it as fertilizer — nature's way of recycling garbage.
31. Remember: All Power Pollutes. Especially gas and electric power, which either smog up the air or dirty the rivers. So cut down on power consumption. In winter, put the furnace a few degrees lower (it's healthier) and wear a sweater.
32. Use live Christmas trees, not amputated ones, and replant them afterwards. Citybound? Contact your Parks Department.
33. Protesting useless pollution? Don't wear indestructible metal buttons that say so.
34. Fight to keep noise at a minimum between 11 P.M. and 7 A.M. Studies show that sounds which aren't loud enough to wake you can still break your dream cycle — so you awaken tired and cranky. By the same token, be kind to neighbors. Suggest that your local radio/TV station remind listeners at 10 P.M. to turn down the volume.
35. When you shop, take a reusable tote with you as Europeans do — and don't accept excess packaging and paper bags. The packaging you take home today becomes trash tomorrow. This is costing you in terms of dollars and health. Packaging can be deceptive, disguising product contents. Packaging increases the cost of the products you buy. By converting trees to paper, it upsets the forest life-cycle. You must pay high municipal taxes for trash disposal. When packaging is burned in building incinerators and city dumps it contributes to air pollution. Burning paper gives off carbon monoxide and particulates. Pollutants irritate your eyes, nose, throat and lungs.
36. Patronize stores that specialize in unpesticided, organically-grown food in biodegradable containers. There's probably such a health food store near you.
37. Radicalize your community. Do something memorable on April 22nd, the date of the First National Environment Teach-In. One group's given Polluter of the Week awards to deserving captains of industry. In traffic jams, other groups have handed out leaflets titled "Don't You Feel Stupid Sitting Here?" which list advantages of car pools and mass transit.
38. You as a citizen can swear out a summons and bring a noisy neighbor to court. If the problem's bigger than that, talk to a lawyer about a class-action law-suit. A group of people, for instance, can file a class-action suit against a noisy airline or against a negligent public antipollution official.
39. Last, and most important —— vitally important —— if you want more than two children, adopt them. You know all the horror stories. They're true. Nightmarishly true. And that goes for the whole American economy. Unless we can stop fanatically producing and consuming more than we need, we won't have a world to stand on. Care! Who will, if we don't?

The Central Clearing House
107 Cienega
Santa Fe, New Mexico

Province of Saskatchewan

DEPARTMENT OF AGRICULTURE

LANDS BRANCH

ADMINISTRATION BUILDING. REGINA

OFFICIAL

Re: Available Crown Land in Saskatchewan

Land under our administration and suitable for agricultural purposes are allotted under a lease agreement. There is a great demand for all such lands that become available and they are usually allotted to vicinity residents who require additional land to make their farming units more economical.

People who are interested in moving to this province may become established in farming by either purchasing or renting privately owned land. You may wish to write to the Boards of Trade or Chambers of Commerce in certain areas of the province to request the names of real estate agencies who may be able to supply you with such a list of available land.

Our policy for the sale of provincial land provides only for a sale to lessees who have completed five years satisfactory performance on the lease.

Yours truly,
D.L. Wickenheiser,
for Supervisor
Land Dispositions

RUINED DINNER

Wrote to the Office of Land Management in Alaska about homesteading. Prompt reply states, all homestead land indefinitely withdrawn —— ruined my dinner. Very nice Xerox form letter though.

Skip Whelan
San Diego, CA

CLOSED

Land and Log Cabins in B.C.

Concerning your information on Canada as printed in your January Supplement, there is a new Land Act for B.C. in the process of being brought out and anyone who has gotten one previously should enquire again. There is nothing startlingly new about it, but no more homesteading — no problem, there are other ways to get Crown Land.

You mention pamphlets available from the Federal and Provincial Depts. of Agriculture, but there are also pamphlets of interest available from other departments, namely Forestry, Fisheries & Wildlife, or whatever. The names of the departments vary somewhat from province to province but a letter addressed to the vague name of the department (they'll get the picture), c/o the Parliament Buildings, the Capital of whatever province, should get there. Just ask for a list of their publications.

Also in the letter(?) about the Queen Charlottes Islands, Kieth Gilbert makes it sound easy to get that $70 a month Social Assistance. Be warned, it is anything but automatic! I got some money from them about 5 years ago and if I could have found a job I'm sure I'd have had a much easier time working for the money than grovelling about for it the way I had to.

Concerning the situation in the Interior of B.C. where I live, there is quite a bit of land available. Unfortunately, little is accessible by all-weather roads (maybe that should read fortunately).

In your Fall '69 Catalog, your write-up on "The Wilderness Cabin" states that "not many log cabins are still being built." Not so up here. I helped my wife's cousin build 3 last fall and he isn't the only one around here building them. And lots more people know how. So, book or no book, if anyone wants to build one up here, it would be wise to get someone to help — there's a lot of hard work involved and you may as well build a good one the first time.

Sent by

Bill Harany
100 Mile House, B.C.
Canada

CANADA LAND ACT

In order to discourage foreign land speculators the B.C. Land Act has recently been ammended to allow sale of Crown Land to Canadian citizens only. This ammendment renders both the Crown Lands and the Canadian Tax Land for Sale items on page 41 non applicable to other than Canadians. Perhaps anyone wishing to use Canadian land should be or become a citizen anyway.

The Island Fantacy In Depth by Kieth Gilbert is fantastic but, the Charlottes remain a pretty soggy place and some of the points in the article need criticism. Big dogs and bears can result in big trouble for instance. A recent case of bear gets man was caused by dog. Those arriving intent on receiving welfare could encounter much more trouble from "locals" than immigrants of different racial origins. Also trading with the Indians seems to have gone out with the fur trade.

Even though parts of Canada seem very remote, it is difficult even here to find areas where the landscape remains unscathed by our North American quest for resources in support of our often crass economic and industrial processes. The way of life Kieth seems to suggest is probably hard to accommodate until we learn to allow for it again. Many books and articles indicate the commitment and cost involved in the establishment of such intentional communities and it should not be overlooked that these investments are likely harder to meet where the climate is harsh.

John Wilcox
Victoria B.C.

(GREEN RIVER, UTAH 1970)

Farm in Maine

We would like to recommend Maine as a place to buy cheap land. We got 100 acres farm (70 acres woods, 30 acres fields, house, barn, trout stream, wild animals, springs & several million black flies — scourge of the northern woods) for $6800 last summer. This is of course not on the ocean, but in the northern central part, about 45 miles north of Bangor.

Maine also has its own semi-underground paper (sold at Howard Johnson's throughout the state), the *Maine Times,* which concerns itself with the right things.

Mike & Carla Mantler
New York, N.Y.

OZARK LAND HANDLERS

Owensby's Ozark land circular — prepared with photo, description and cost — available by writing: Owensby and Sons
Home Office
South Side of Public Square
Buffalo, Mo. 65622

- No. 912 -

Secluded Ozark retreat. Four room rock home on 40 acres just 1/2 mile from the Niangua River. About 12 miles from town, on an all-weather road and all routes. House has 2 bedrooms, electricity, gas, and running water. Small barn in good condition, and rock fruit cellar. Low taxes. Drilled well and pressure system, cistern. Phone service is available. Ideal for orchard & garden, six acres open. Price $6000, with terms.

- No. 911 -

Here is the perfect 40 for a beef cattle operation. 26 acres in cultivation, recently brought up to soil tests. Owner reports over 500 bales of hay cut last year. Extra good 4-strand barbwire fencing. Good spring-fed pond for year-round water. Old 4-room house, could be lived in. Well on back porch. Within 25 miles of Springfield, 1 mile off main highway. 2 miles from country store and church. $3950 with less than 1/3 downpayment.

- No. 910 -

Unbeatable combination--good location, good land & good house. 40 acres on paved highway, all routes, 4 mile from country stores. 25 acres needed to permanent pasture, balance native grass & 7 acres of timber. Smooth, sandy loam. 2 ponds, 1 spring-fed. Exceptionally clean & well-kept 3 bedroom home, redecorated inside. Bath, utility room, gas & phone. Lots of storage space. Several outbuildings. Owner says the well is real good one. Taxes $132. Possession 30 days. $14,500 with about 1/2 down.

PROVINCE OF MANITOBA

DEPARTMENT OF
MINES AND NATURAL RESOURCES

LANDS BRANCH
810 NORQUAY BUILDING, WINNIPEG 1, MANITOBA

Re: Available Crown Land in Manitoba

This will acknowledge your recent inquiry respecting Crown lands in the Province of Manitoba.

As there has been heavy pressure from the public for the use of Crown lands, suitable lands for either agricultural purposes or for grazing and ranching is limited. The Province has been settled for many years with the result that lands suitable for these purposes are now in private control. Frequently, as the frontiers are pushed back, new lands become accessible for future development but with the heavy demands we have had to restrict disposition to residents in the immediate area.

In the early years of settlement in the Province there was a homestead policy whereby settlers could get land by carrying out certain improvements on unoccupied Crown lands and thereafter apply for title. This policy was discontinued in 1930.

The situation with respect to sites for summer homes and hunting lodges is also limited. No disposition is made of sites for summer homes unless they are within surveyed subdivisions.

We are pleased to acknowledge your inquiry and to give you any information we have available to us with respect to Crown lands in Manitoba but the situation is that those wishing to settle in the Province are advised to obtain their needs from private sources.

Yours truly,
M.C. McKay,
Director of Lands.

OPEN

LAND SURVEY

Yukon and Northwest Territories will lease unsurveyed land and sell some surveyed land to anyone — no age, citizenship, or residence requirements.

Alberta has a 3 year residence requirement. You must apply in person at a sub-agency land office. Alberta Dept. of Lands and Forests, Edmonton, Alberta.

New Brunswick has very little land available and you must be a resident. They will give you title after you occupy the land for 3 years. Write to New Brunswick Dept. of Lands and Mines, Fredericton, New Brunswick.

None of the Provinces will sell timberland; they only sell cutting permits. Also the gov't keeps all mineral rights whether you lease or buy their land.

John Pashdag
Mt. Baldy, CA

HARDY TYPES

From what I hear, Colorado, New Mexico, Arizona, etc. are getting pretty crowded with land getting scarce and too many hip tourists that don't like to help, and all the other bullshit that happens when an area gets too popular.

Northern Minnesota might bear looking into for hardy types who don't mind cold winters and good hunting and fishing. Land in St. Louis County around Duluth runs anywhere from $2.50 to $6.00 an acre depending mostly on timber value. Some private land is also for sale. I bought 20 acres and a cabin for $500 last fall. My nearest neighbor is 1/4 mile away and the woods are full of rabbits, deer, grouse, bear and moose. There are also abandoned farms west of Duluth in some of the neighboring counties. Write for a start to:

Counry Auditor
St. Louis County Court House
Duluth, Minnesota

for a free list of land to be auctioned off at the land sales held twice a year.

Throw in a quarter and they'll send a huge map of the third largest county in the country.

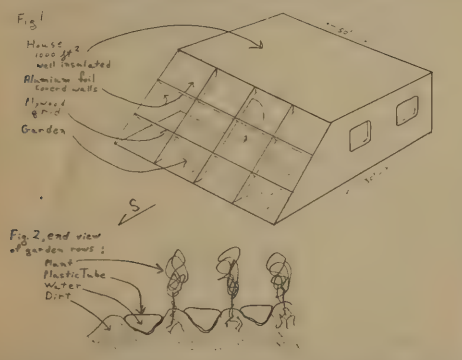
Skip Porter
Detroit, Michigan

Shelters and Such

WHAT IS A BIOSPHERE?

The notion of the biosphere is to make heating and growing food integral functions of a dwelling through the use of solar energy. This would be two large steps in making a dwelling a self-sustaining unit. This is accomplished by the use of a transparent plastic membrane which lets sunlight in but does not let heat or infra-red radiation out. The membrane is a solar energy trap.

See figure 1 for a possible (rather unimaginative) biosphere configuration. The membrane covers and is stapled to the plywood grid. The walls of the enclosure are covered with aluminum foil to increase the intensity of light falling on the ground. Here it is either absorbed by the plants (the increased light intensity compensates for the short winter days) or else is absorbed as heat in the ground. The heat storage capacity of the ground is greatly increased by laying clear plastic film tubes that are filled with water in between the rows of the garden (see figure 2). The temperature inside the enclosure is maintained at about 100° F by venting excess heat. Whenever heat is needed inside the living area, the door is opened and air convection removes heat from the water and dirt and distributes it in the living area.



According to calculations, three overcast days with an average temperature of 25° F or below are needed before the temperature inside the house drops below 70° F, and then only at night.

The usable garden area is 400 square feet, more than adequate to produce all the fresh fruit and vegetables an average family can eat. (Fruit trees are sold which have five different kinds of fruit on them.) The garden is in a tropical environment, but since the system is closed, almost no water is consumed. The garden is self-sustaining and independent of the outside environment with respect to temperature and water. All it needs is sunlight.

The membrane consists of three layers. First, an outer skin of 16 mil clear vinyl. This is the protection against the wind and rain. The angle of the membrane allows it to shed snow and dust. Then, thermal insulation is provided by a 3 inch thick layer of clear acrylic foam. The cell (bubble) size is 1/2 inch and the cell walls are very thin, so that at least 70% of the sunlight gets through. The thermal conductivity of the foam is less than .2 BTU per hr. square ft. °F. The third layer is a paint that is clear to visible light but white to infra-red radiation. This traps the infra-red radiation inside the biosphere.

The estimated cost of materials for the biosphere breaks down as follows. For a house with 1,000 square feet of floor space, the membrane area required in New Mexico is 700 square feet:

plywood grid	11¢ (a wire grid would be cheaper)
16 mil vinyl	9 per square foot
acrylic bubbles	5
infra-red paint	2
aluminum foil	3
fasteners	2
miscellaneous	4
TOTAL	36¢ per square foot, or, $250.00

For a lifetime of 10 years, this is $25.00 per year. Except for the vinyl, the lifetime is at least 10 years. It should not be difficult to find a substitute for the vinyl, glass if nothing else.

The work to be undertaken is to make the acrylic foam and the infra-red paint. I have been in touch with people at the Rohm and Hass labs who are making acrylic foams with a much smaller cell size. I have made foams of uniform 1/2 inch cell size and very thin walls from gelatin, soap and water. They look just like frozen soap bubbles that don't pop when you touch them and last for months. I have reason to believe it will not be difficult to translate the foaming or bubble blowing process into acrylic, which may be processed in most of the ways plastics can be processed.

The Russians have made a tin oxide coating for glass that is transparent to visible light yet a mirror to infra red. An acrylic paint with a tin oxide pigment would probably be a cheap and satisfactory infra-red pain but this must be experimentally investigated.

A PROPOSAL

Solar energy and hydroelectric power are the only non-polluting energy sources. Hydroelectric power is near its capacity and solar energy has not been widely used because of the high capital investment of solar heating.

The biosphere is designed to provide solar heat and food for a dwelling in below freezing weather. It consumes no water, so areas that are uninhabitable because of lack of water or fuel or short growing season would be habitable. The estimated cost for materials is 25¢ per square foot of floor space of the house. The estimated lifetime is ten years. For a 1,000 square foot house (average family size) this comes to $25.00 per year for heat, fresh vegetables, and fruit. This cost is less than one-third the cost of the cheapest solar heaters now in operation.

The problem in building a biosphere is essentially the problem of how good a membrane can be built that is transparent to light yet is also a thermal insulation. The aircap used in the growhole which is now functioning at Llama is adequate for a solar heated greenhouse but a more efficient membrane is required for the biosphere, which must also heat a house.

I estimate it will cost $1,800.00 to make the first piece of this material. The expenses are as follows:

$100.00 per week, salary

$ 30.00 per week, phone (The making of acrylic foams is a state of the art process, which means it's in people's heads, not in print. Thus the phone bill.)

$ 20.00 per week, supplies and equipment (This figure is low because the manufacturing process is fairly simple and involves no expensive machinery —— This technology will be cheaply accessible.)

TOTAL: $150.00 per week.

The study should take about 12 weeks (although it is hard to know exactly) for a total expense of $1,800.00. Two problems will be investigated: the blowing of acrylic bubbles and the finding of a good material to make the bubbles opaque to infra-red radiation.

I would guess the odds for success at about 3 to 1. If it is successful, it will then be possible to build a biosphere.

Day Chahroudi
224 Montoya Street
Bernalillo, New Mexico 87004

Modular Houses

I have a lot to say on modular houses. The first thing being that people have been trying to market one in the U.S. for 40 years, and they haven't made it yet. The idea is great, but there are lots of problems. The typical stud wall house has had 80 or 90 years of refinement. They are pretty efficient. What modular prefabs need is about 5 years of mass testing & refinement by good construction people and designers. The trouble is no one has been able (or wanted) to afford that kind of investment yet.

The economics is tough. After a big capital outlay for a plant, tools, storage facilities, design time, volume, sales, and promotion, most prefab builders find that their product is just as expensive as a house that some local carpenter can nail together with no capital outlay. They are trying it again though. There is a big prefab housing fair here. And nationally "Operation Breakthrough" is the same thing -- developing systems, components, and prefab concepts.

Our office is into low cost housing too. I'm not sure prefab is the answer. "Precut" is a distinct possibility though. There are a lot of precut houses around that are really cheap. Lindal is one. So is Pan-Abode of Renton, Washington. Most of them look and function like shit, but are cheaper than prefab. Precut would function on a modular type system to be most efficient.

An idea that I have wanted to explore for some time is a spray-on concrete house. It would be formed with a web of small re-bars bent on the job to the evolving design. The drawings would just be a nebulous starting point. After bending the bars to form a rough shell-shape, a layer of metal lath would be wired to the bars, and the whole thing could be shot with concrete like a swimming pool. Windows and doors and ventilation are the biggest problem. It would probably look like a big snail, and it could be semi-buried. Very organic. I'm surprised that Wright never got on that trip. Everyone could do their own house with a few simple rules of thumb about spans -- cheap. Also no architects, which wouldn't be a bad thing.

I really hate domes. Not for convention centers or big buildings, or radar domes, but for houses they really turn me off. No matter how logical and neat they are as a shell, they are a shell, and to make small ones to live in is inefficient from the viewpoint of human relating to dome. Lots of bad vibes from seeing one stuck out on a prairie. Would rather do a very organic snail-form and tuck it into ground 3 or 4 feet. Domes are technology imposed on old Mother Earth, and no matter what Fuller says, they will never be "of the earth".

Jay Anderson
Honolulu, Hawaii

ANNOUNCEMENT

The Soleri Show has traveled
and is now in New York City.

It's at
The Whitney Museum of American Art
(fourth floor)
Madison Avenue and 75th Street
New York, N.Y.
and
The Reese-Palley Gallery
93 Prince Street
New York, N.Y.

Show started July 17
and will run 8 weeks through
the middle of September.

june 7 '1970

dear whole earth,

Enclosed is a snap shot of my just about completed house. i am in great need of a used ~~left~~ arm. could you please ask your readers to keep on the look out for same. winter is almost here and im getting a draft from the pit. Thanks, nodrog.

About Paolo Soleri

Soleri was born in Torino, Italy 50 years ago. He was an honors graduate in architecture and went to Taliesin to work with Wright. He didn't last too long there and ended up on a mountain side outside Scottsdale in a tent with a fellow former-apprentice. After marrying he went back to Italy for a while and then returned to Scottsdale in 1954. If you want more of that kind of background try to get hold of the catalog to his show at the Corcoran Galleries in Washington, D.C. Soleri began building earth-form concrete houses and drawing and making ceramic wind bells. He draws on great rolls of butcher paper in crayon and what he draws are viscious. It must have been in the late 50's that he began to attract apprentices who came and lived and made bells (he expanded into bronze-casting) and made models and helped get other structures underway or finished. About 8 or 9 summers ago students started spending summers with Soleri in a program with Arizona State called Silt Piles. They built the buildings that now comprise the Cosanti Foundation.

I can imagine a scenario for Soleri starting his thing: He's rapping with some friends and one says, "what if . . .?" and Soleri sits there awile and then says, " . . . yeahhhh. . . ." and gets up and walks out.

We saw his show at the Corcoran; the program (catalog?) (thing?) that goes with the show was something else. It deserves listing with his book; it's better done in some ways than the book but then it's also another thing itself. The show was too much. It's supposed to travel but the scope and sheer weight and logistics of even setting it up the first time must have been . . . . It's supposed to travel anyway and maybe it can come your way *[see note]*. The best way is to visit Scottsdale I guess; will there be pilgrimage trails?

Ron Williams
ONYX
New York, N.Y.

STONE WORKS

Stone walls & buildings. These are actually weaker than they look. It was the wood frame houses that survived the Alaskan earthquake. Cement got no give like wood & stonework is much slower than carpentry.

Still it looks like all time and we went ahead. In planning make sure your foundation extends deeper than the frost will. Here in Maine frost heave is a prime consideration for a stone building could easily be cracked to bits.

Surround the foundation with rocks of any size & type up to grade to allow for movement. Don't pack dirt in there.

As for type of rocks to build with, granite is best. Save your really square stones for corners. Stratified, slate, etc. (I don't know the geological terms) are no good. These sedimentary types are porous and the water they suck up will expand/contract and you're in trouble. If you toss it down on the pile & it shatters there you are. But don't slam it cause anything would crack from that.

Use forms to get the straightest walls. Within these you can lay up vertically faster than without, but time saved is lost putting the forms together so the outside surface should be the consideration for forms. Our walls are straight enough to sight down tho it's a personal aesthetic.

Even with forms, don't just toss the rocks & mortar in. A strong beautiful wall is laid up rock by rock. No other way. I worked with a mason of 60 years to learn to lay fieldstone. Practice is the way. Knowing which rock to choose from your pile. Like a puzzle with no two parts the same. Choosing the wrong rock means that your work comes down on your feet. (So don't be barefoot! Also cement contains lye that burns like brimstone. Wash the stuff off afore it eats your very hide. After a few weeks you'll have to wear rubber work-gloves as your hands will be most tender.) An old Maine stonemason told me that "Even a round rock has a flat side if you can find it."

After building a while you'll understand this. Lay up a rock for strength always thinking of the rock that will rest atop it. Don't be cheap with the mud (cement) but learn what it won't do. Sometimes a rock will get a better bite on another when they're dry & just have cement around their edges. Like bricks only more tricky. If you decide to eyeball it (build without forms) stretch 2 strings down your outside dimension & lean over & sight down. When you only see one string that's your limit. Careful that a rock doesn't protrude & throw your line off. It's easy to build it too wide.

Have a large pile of rocks to choose from. Tiny to fist size stones are what you need to trig up the biggies that wobble. Little triangular shapes are best. Build a wall that rests on rocks tho, not tiny trigs or cement. The old timers here built walls without any kind of mortar (!) but just skill in laying. Those walls are still solid 130 years later. So LAY up your rocks, don't glue them up.

Progress right around your foundation a layer at a time so that when you come back to the starting point you'll be laying on dry or almost dried wall. This isn't possible if you're using forms. This because you have to build right up several feet & then move this whole rig down the line.

We built a building 30x36x11 with foundations 4 feet deep on a 1 ft. poured concrete footing. Wall thickness was 1½ ft. up to grade & a foot above ground. Solid enough for Maine but you might scale this down a great deal in a milder climate. (By the way, if you're building stone walls around an existing building it would be most simple, for you already have your forms. Accordingly if you plan to have studded interior walls go ahead & put up your studding & then cover the outside with plywood & build along that. The plywood could be removed when the cement dries & shifted for use again.)

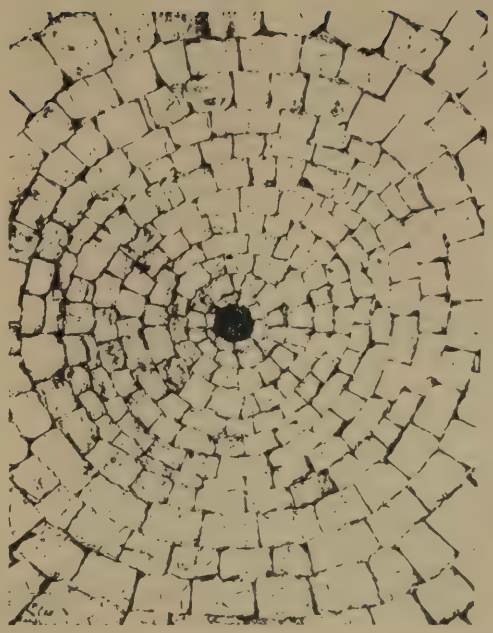
We used an old gas engine to run our mixer. Keep cement from the motor & you'll be ok. Rocks are plentiful in Maine. For special rocks try the seashore or a tombstone dealer for scrap. We got lots of colored marble & granite for a six-pack of Shlitz. Some states forbid selling old tombstones but we got some fragments for the walls. Neighbors consider any messing with tombstones goulish so turn the lettering to the inside. You may have the sheriff's grandmaw's rock.

Lay your heaviest rocks around your feet, as lifting gets hard above your chest. Favorite, sentimental, or mystical rocks stand out from eyelevel to about eight feet up. Don't bury that romantic special thing at ankle level. We tried to get a piece of the moon for our wall but NASA never came through. A few meteors might be astrologically favorable for your project. Since our walls went up eleven feet we laid from the flatbed of a 2-ton truck above 5 or 6 feet. This proved to be an ideal mobile staging with room for two masons, mortar box and a large rockpile.

When the walls are finished go back and point up around your rocks. Pointing is a mason's signature. Use pointing cement only in small batches (a mixer full will dry out before you could use it) & a small trowel. The stuff is quick drying & sticks when you flip it in the cracks.

Look around at good walls before you start. Observe or work with a mason if possible. Don't get discouraged. It takes a bit of laying to make those rocks stay up there but you can do it if you can dig it. Consult the *I Ching* on any major problem.

Mark Mendel
Dixmont, Maine



For Stone Houses

I read the letter about rocks for building purposes [p. 21 in the March Catalog]. I'm a geology major, and think I can help a little.

First, he says the land is covered with volcanic rocks. These will fall into three types:

1. Dark, heavy, fine grained basalt.
2. Glassy massive obsidian, various colors.
3. Light weight cellular pumice or scoria.

Of these three, the basalt is the best for building. It's tough, very hard, and weathers slowly. The obsidian is essentially glass, and though stronger than steel, it is easily broken. It is strong enough to build with, but may be too non-porous and smooth to mortar together. It also weathers slowly. The pumice and scoria is no good for uses requiring standing weight, such as a wall. However, it will make an excellent insulator for hollow walls or sub floor fill.

If the rocks are of many different types, you will have to examine each type for three necessary characteristics:

1. It should be hard and heavy.
2. It should be fine grained.
3. It should not weather appreciably.

To check weathering, break the rock and match the fresh surface to the old surface. Only a slightly faded appearance on the old surface is permissable. A different color on the outside as compared to the inside is indicative of severe chemical weathering. Also check the hardness of the weathered surface. It it is flaky or crumbly, it's no good.

Also check the well rounded rocks in any stream beds which may be on the property. These rocks are often the most resistant and hardest

Roy. L. Porter
Virginia Beach, Virginia

ABORIGINAL SWEATING

Your suggestions for outdoor living have been extremely enlightening. One suggestion — the aboriginal sweat house or sweat-lodge has a long history in N. America and most likely has its adaptive advantages. The Finnish and other similar Scandinavian saunas are perhaps the only extant parallels in the Western World — and unfortunately are costly and require a certain amount of skill to construct. However the aboriginal sweat house takes many forms — all of them easy to construct and if done right have nearly the efficiency of an expensive sauna. I have personally constructed two — after Nez Perce practices — and have surprised many of my friends with their heat-holding capacity. The sweat house ritual is varied and complex — some groups separate the sexes, i.e. don't sweat together (Nez Perce for example); others sweat communally. The social, psychological and physiological advantages of sweating are numerous and not to my knowledge adequately researched (Finnish data is best). This Nez Perce (contemporary) sweat house will sweat four to six:

You need:

- 5-7 green, usually deciduous, poles, approx. 15' length
- 1 ball sturdy twine or if a purist, rawhide strips
- blankets — Nez Perce uses blankets of wool, old coats, clean gunny sacks, any pliable insulating material of cloth will do, get plenty!
- 2 pitch forks
- One 20 gallon can — not absolutely necessary
- 2 18'–20' sticks, 1" or so in diameter

First — you will need a location near water (usually a stream) — cleared of all brush and undergrowth. An area 30' in diameter will do depending on local conditions. Stream must be deep enough to allow submergence of one's body.

Next — shape of wickiup type lodge will be semi-hemispherical about 8' or so in diameter. Construct frame by holding green poles in proper shape over a fire (small) and slightly dry poles which will hold curved shape better. Tie poles together with twine thereby maintaining shape.

DIAGRAM # 1

Next — Cover frame with insulating material — 3 or 4 layers will suffice. Leave no spaces! Lodge must be nearly air-tight. I use an initial layer of plastic tarping to aid in heat retention — although I dislike its negative appeal. Leave a door just big enough to enter — you can hitch a cross-piece to the frame of the lodge and hang several blankets off it making sure an adequate seal is formed.

Next — dig a small depression inside the door and to the right — this becomes the receptical for the red-hot rocks. Should be 10' deep and 25–30' in diameter. Line this hole with good rocks (see definition of a good sweat rock, which follows).

Next — gather 30 or so sweat rocks. A good rock is hard to find. My best luck has been with slightly vesicular basalt, subangular and about twice the size of a brick. Test rocks by heating over fire to a red hot glow — sprinkle over with water. If the rocks spit and hiss but do not explode or crack — you may have a good rock. River rocks have been my best source, i.e. subangular basalt cobbles. Granite is too heterogeneous.

Next — gather wood — the best wood is usually the hardest to procure. Most deciduous wood burns hotter but is harder to find. I use anything I feel right about. Never cut a green tree for firewood or for any stupid reason. Use dead wood, stumps. You need a lot. Build your fire place next to, but not too close to, your sweat lodge, which is hopefully next to, but not too close to, the water. Stack your fire logs, crosscrossing to achieve a sturdy and fairly flat top, on which you evenly distribute your rocks. Fire is fairly big and hence you will need adequate precautionary measures.

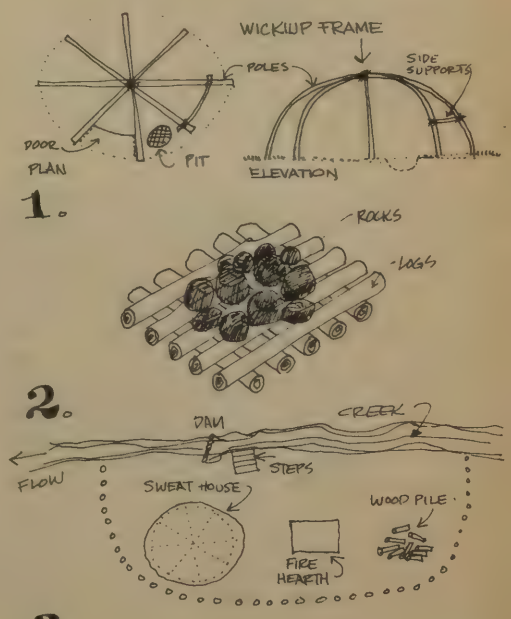
DIAGRAM # 2

Next — light fire — usually takes 45 minutes to an hour or even longer depending on wood. The rocks fall thru to the ground and become ash-covered. This is where the pitch forks come in. The rocks should actually be red hot and you will need them to pass the rocks into the house. One individual must receive and arrange the rocks in the receptacle pit so he will need the two sticks. By the way, the house is only about 3½' high in the center so this individual is on his knees. The pitch fork will facilitate cleaning burning ashes and embers from the rocks in the transferring process — these ashes would cause smoke in the lodge. Line floor of lodge with clean gunny sacks — cheap and available at any feed store.

Next — after rocks are all in place, all can climb in (naked of course) and enjoy. The host tends the rocks by sprinkling small amounts of water on top which cause increased humidity. I use pungent water, made by using certain roots; these cause a delightful fragrance I groove on. Sweat house lore says you should be serious or at least not too playful. When you are well heated and feel ready for the water — do indulge. Most serious sweaters consider the plunge into the water and the accompanying sensations to be the best part of sweating. Three times in the sweat house should be enough — an effective contraceptive too.

An existing sweat house:

DIAGRAM # 3



Hope you can use this info. If you have questions, do write.

Submitted by
Greg Cleveland
Albuquerque, N.M.

The Amazing Tetrahedron Tent

The Amazing Tetrahedron —— a two man mountain-wilderness tent of new design in nearly every respect. Utilizing the principle tetrahedron properties of high inside volume per given surface area, this tent provides agreeable distribution of inside room, stability and ease of setting. Designed with high altitude winter conditions in mind, this tent by virtue of its low cost, light weight and spaciousness also provides a comfortable summer habitation; being fully water tight when fitted with a nylon rainfly. Standard equipment includes two tunnel doors, vent holes, zippered cook hole, coated rainfly and complete set of poles and stakes. Fabric is 1.9 oz. ripstop Nylon, the floor and walls being of coated Nylon. Further information available upon request, or send us your special requirements. Tents are built on order and individual preferences are considered during construction. Basic price is $80, subject to additions or deletions.

Tent wt.	3 1/2 lbs.
Pole wt.	2 lbs.
Fly wt.	1 1/4 lbs.
	6 3/4 lbs.

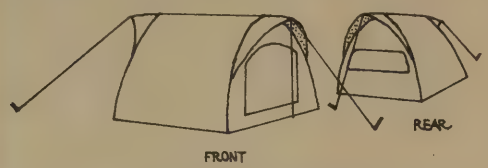
The creator of this tent brought one by the Truck Store. J.D. says he likes it.

The Amazing Tetrahedron
Box 8552
Stanford, CA 94305

Tent from Virginia

Some info on the tent I asked you about. I wish to advertise the plans for sale. I'll give you the design (basic), advantages of the tent (features which separate it from other designs) and random thoughts.

1. Design — modified quonset



The advantages are bound up with my own philosophy of being out doors. The cowling over the back window gives complete rain protection, so that with the window open full, cross ventilation is possible if it rains you roll over no minute scurrying. Also the front entrance and back window are immense so even in shitty weather you dont have to feel boxed in; you can sit inside and groove on the rain. The top of the tent of "top sides" quonsetly speaking, are made of fully coated nylon & does not breathe. The back & front are H_2O repellant & do breathe but because of the protective cowlings never really get wet.

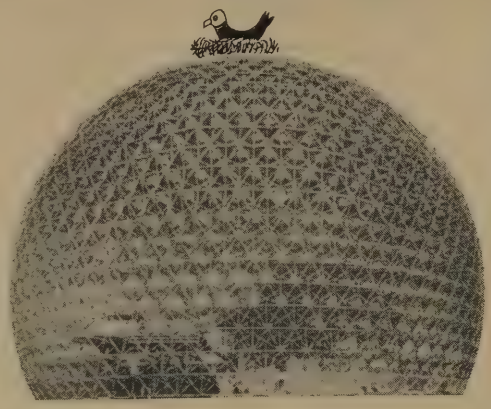
The frame is made of fiberglas rods 10 sections ea. 28" long, total weight 14 oz. Because the two guy lines pull on the cowlings and the cowlings pull equally on the frame it reduces the "belly" considerably.

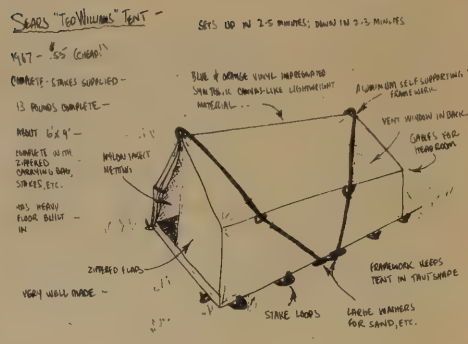
Because the rods are enclosed in the tubes they stand up higher than the sides of the tent so if you want to put a space blanket over the tent to keep off the sun you have a free air space.

If made with a good grade of nylon the tent with the poles should weigh about 4 to 4 1/4 lbs. and be able to fit in an area about 6 x 4 x 5. cigar box?

There is one weak point in the design, high winds, but all tents become foolish in high winds. This weakness can be reduced simply by lengthening the cowls till they touch the ground. Possible "in the future" modifications may include a zip out floor so you could add a section and have a stand up version, or doubling the inside dimension by running the cowls to the ground, although this limits the size of the door and fucks up the shape quite a bit. Anyway I would sell plans, instructions, and material suppliers, for those interested.

John Keary
Box 641
Virginia Beach, Va. 23451





A Tent for Motorcyclists

I've ridden a bike (motorcycle) for about fourteen years and have yet to see a better one in my thousands of miles than one sold by that down home institution of good ol' Sears et al. Virtually everyone in the know in the bike crowd has one. Thought I had the dope about it for model number and all that with me here on the ship (I work on a government ship), but don't. Anyway, it looks a little like a pup tent except that the sides are raised; come to think of it, its shape is like that of a typical dog house. Its floor area is six by eight or nine feet. Is made of a vinyl impregnated synthetic canvas-like material as I recall, and I can attest that it is absolutely waterproof under the severest of storm and wind. It is blue and orange in color (a yukky color combination, but you can't miss being identified when astride your bike, since tent comes with zippered enclosure of same color), and has separate nylon zippered flaps of insect material on the front end and also on the window at rear for ventilation. It has a floor made of similar, but heavier material; there is a three inch high strip across the front to repel creepy crawlers and water and other terrible liquids. Being of generous dimensions, the tent will sleep two with more than enough room for all the usual camping garbage and accessories inside. I've slept three lengthwise with no crowding, and by sleeping atwartships, four could be put in without difficulty. The real beauty of this tent is that it has the external aluminum self supporting tubing that has a minum of parts and keeps the tent rigidly supported without use of poles or those damn guy lines staked all around to trip you. The tent can be erected in about three minutes and taken down in two; I've literally set up in pitch dark with no sweat. The aluminum poles even have a large aluminum washer you can use when pitching the tent in sand, etc., to keep the poles from giving way into the sand. The whole bundle rolls down into a package about twenty inches long and about six to eight inches in diameter; I pack mine across the back end of the bike and set it crossways on top of the saddlebags; makes a nice neat fit. Tent comes with a set of good clear instructions; once you've put it up the first time, the instructions can be dispensed with. It's that simple.

I recommend this tent primarily for bike people or people with car hating motel bills. The tent would not be too suitable for backpacking because of its weight of thirteen pounds; obviously, this isn't of any consequence for bike or car.

I bought mine in '67 and it cost me $55; by now it is probably about $60 or so with inflation, but I'd like to see anyone come up with half the tent for twice the price. For a bike rider, it's a must. Have seen hundreds of tents that just can't come near it. And from Sears yet!

Gary D. Christenson
Seattle, Washington

It's a Ted Williams tent.

WANTEDWANTEDWANTEDWANTEDWANTEDWANTED

MOLASSES-MAN-HUNT

Anyone having information about the where abouts of a Robert Morse or the transformer or the molasses house secrets — please contact the Whole Earth Catalog Lost or Found Dept. Immediately.

Gravity and Domes

I have two things that I hope someone might be interested in. Firstly a dome system that accounts for gravity. (I enjoy the way Fuller perceives but I keep coming up with different conclusions.) Upon observing a bubble, for instance, I noticed it got thinner at the top / evidently thicker towards the base (less strength at the top where it is least needed and more at the base where it is most needed). Gravity seems to me to be the greatest single force to build against, or at least, to consider the most in any structure. Building against omnidirectional forces of equal or almost equal strengths would seem to work well in space or where a single force was not predominant. The EXPO dome seems to have been altered from midway to its base — from geodesic alternate (outer) system to a concentric circle system — I presume because of gravity (the weight of the dome itself). I would be interested in any response, critical or not. The system I discovered doe account for gravity. I am unaware of this system being discovered previously.

The other thing I hope someone might be interested in is a less structurally efficient system. An architectural approach, unlike any I am familiar with (including the Zome), this is a system for "non-systems." It reduces the surface of almost any form to its most efficient (geodesic) relationships. I am in the process of applying this to mountainous forms and am also trying to have both systems programmed for computers.

Vince Kelly
Tempe, Arizona

Roger Hayward's "undecidable" monument

Tools and Techniques

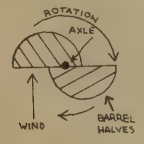
Wind and Batteries

I would like to comment on a comment on p 39 January (I think) p 7 March Re: small power plants for electricity generation.

The plants (wind) I've seen in operation all used banks of storage batteries. These batteries of the common lead acid type used in cars will last several years more than usual if taken care of (feed rain water and keep charged up). Direct current is of course produced and some sort of inverter would have to be used to get AC out of the system. I recall a rancher saying the company who sold him his system guaranteed the batteries 10 years; lots of technical data is available on batteries since telephone exchanges use them for emergency power.

The use of batteries with either water wheel or wind generation systems allows large surge power output; with only a few watts charging on the average thousands of watts can be drawn intermittently.

Car alternators can be used for either water wheel or wind installations; I recall seeing that VITA was working on such. They also had a design for a wind type which had a propeller made by cutting a 55 gallon drum along its axis and then offsetting the halves so that it became a two cup anemometer like rotor (I don't know how successful this was but suspect they may have had starting up problems when the wind died down all the way). When you use a car alternator you can use the regulator to keep the battery charged correctly too. The maximum output of a car alternator is in the 300-600 watt range.



On large wind plants flywheels have been used to store energy between gusts; to make the whole thing efficient several transmissions must be used and it's pretty complicated.

I think the aesthetics and ecology make gasoline fired power plants unattractive. Rural electric lines not only cost every month but often there is a line building charge on the order of a dollar or more per foot. A single auto battery will store enough to run a 40 watt flourescent lamp 10 hours; or a small radio transmitter etc. Don't expect wind fired plants to run the electric heaters and other garbage. Washing machines are made with gasoline engines; refrigerators are made that run on kerosene. Solar electric cells are still to expensive (unless you happen to run into a heap NASA threw out!). We should all learn to live with less power use. Even if it is superficially cheap.

By the way on propane engine conversions I found a dandy technical book a few months ago; a little dated but lots of good info for the initiate:

> "Butane Propane Power Manual" Principles of LP Gas Carburetion, by Carl Abell, William Clark, ed; Chilton Publishing Co., Chesnut & 56th St., Philadelphia, Pa., 1962, $5.00, 300 pp.

This book covers planning of engine conversions and specific available equipment in considerable detail for those who dig mechanics.

I'd be happy to try help with small generator problems but I don't know anything much about propane conversions! Less power to ya.

John K. Green
Boulder, Colorado

P.S. Windmills still used a lot for water pumping.

BURLAP RAP

The Burlap Store — This outfit makes and sells a large spectrum of burlap colors; solids and tweeds. Their free "fact sheet" suggests uses for this now-popular fabric I had not thought of. For example, burlap may be used as a wall covering, especially suited to cover rough walls, even walls with cracks and holes! It can be pasted on like wallpaper and removed later, ef desired, by simply pulling it off the wall. They even sell the special adhesive recommended for use with burlap. Custom-made burlap window drapes are available as well.

Most colors come as wide as 52" and the cost per yard is 99¢. An even better buy is their remnants (1 yard or less) priced at 1/3 off — no choice of color however. A decorator swatch-folder is available for 25¢ (?) that contains nearly 40 colors. Service on two orders I have sent them was quite speedy.

Bon Bazar
149 Waverly Place
New York, New York 10014

[Suggested and reviewed by Gerard Ruch]

General Electric Silicone Seal

This stuff has to be about the neatest sealing material around. Caulks boats or bath tubs, waxes proof glue, you name it. I've even used it successfully to seal up oil leaks on an engine.

Christopher E. Prael
Portola Valley, CA

Aruban Windchargers, plus . . .

Some comments about wind electric generators. Aruba, in the heart of tradewind-country, is a natural for these devices. Until the island was completely electrified about a dozen years ago, these windchargers were in evidence across the island. The tradewinds blow steadily here, at 10 to 15 knots, for at least a continuous 48 to 50 weeks of the year. The devices used here looked very much like your Dyna unit on p. 39 of the Fall '69 catalog, but were manufactured in Chicago and were either trade-marked or manufactured by Windpower. They were available in either 6 or 12 v. DC models, had about a six-foot diameter main blade, and sold for the equivalent of $70, which included freight, duty and the exorbitant markup most Aruban merchants glean from their customers. The windchargers were used to maintain an array of automobile batteries under charge — often as many as six or seven in parallel. The unit came complete with a cut-out to avoid overcharging of the batteries. The houses were wired with 6 or 12 volt bulbs, and certain necessary electrical items such as water-pumps, etc., were also designed to operate on the low-voltage DC current.

Page 74, Allied Radio. The comments may be valid if you live in the U.S., but forget it if you're outside. Allied has ridiculous minimum order charges and additional exorbitant fees for export. I've had the same service problems that everyone has with Lafayette, but I've had fairly good service from Newark Electronics in Chicago and ten other cities across the U.S.

Special price on Tandberg tape recorders. I bought my model 64 for $205 when Allied, Lafayette, etc., were quoting $495. If you buy three or more model 64's at one time, you get a $10 discount on each. But there will be freight and duty costs. Write for information to Klaus Lefdal / Co. A/S, Bekkestua Pro., Oslo, Norway. In spite of authorized U.S. dealerships, I believe they will ship to the U.S. anyway. They also have good prices on AKG headsets, Thorens turntables, Leak amplifiers, BASF tape, and goodness-knows what else.

The James Leffel & Co., Springfield, Ohio, makes a variety of low-cost hydroelectric power plants, suitable for farms and communes with a stream and some way to get at least 8 feet of head.

The hydraulic ram mentioned on p. 35 really works. I have seen them throughout Paraguay and Brazil, and they are virtually indestructible and clank-along forever, using only the power of a moving stream. Hydraulic rams are available in the U.S. from Rife Hydraulic Engine Manufacturing Co., Box 367, Millburn, New Jersey.

For record-club afficionados overseas; if you like the all-inclusive "order-anything-from-Schwann" type, try Universal Record Club, Box 1111, Mountainside, New Jersey. Their export charges are very reasonable compared with say, Citadel, whose charges are ridiculous.

Another overseas bonus, "Visit USA" airline tickets. Even if you're an American citizen, as long as you reside so-many miles outside the U.S., you're eligible. The $150, 21-day deal is the best — on the feeder airlines. Forget those big promotional jobs on the trunk lines The feeders are good and cover more ground. Since the ticket must be started within 30 days from your arrival in the U.S., get two of them and get 42 days of bombing-around for $300. There are no hitches or anti-double-back gimmicks. When you get tired, jump on the longest flight you can find. When you're hungry, look for one with a meal coming up soon. A big bonus — as of last year, Alaska Airlines was in the deal. So my kids and I flew from NYC to Nome, Alaska and back for $300 (kids are half fare until the age of 20 or 21!). We even made a side trip from Seattle to Portland and back to buy cigarettes — they're cheaper in Oregon.

Pete Schermerhorn
Aruba
Netherlands Antilles

Electricity from the Alaskan Wind

The generators from Dyna Tech have been used successfully for sometime in Alaskan villages. For awhile the schools used them — generally the 32 volt system. The 6 volt system seems suitable for cabins . . . need about a six mile wind.

When attached to the roof of a cabin the noise caused by vibration may become annoying. Erect it on a cache or other outbuilding.

Hope this helps.

Skip Deegans
Portage Creek, Alaska

Together Tool

There is one tool that I have not seen in your (our) Catalog that needs to be there because of its being so together. It is the Handyboy Pliers (No. DH 16) manufactured by the Diamond Tool and Horseshoe Company in Duluth, Minnesota and Toronto, Ontario.

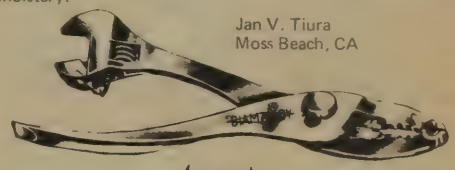
It consists of a six inch pliers, with adjustable wrench, wire cutter, and screw driver — all in one tool. Price is between four and five dollars.

They are very strong and extremely useful — my old man has carried a pair for over a year; in which our activities have ranged from mountaineering — to sailing — to cycling. Time after time when something needed to pulled, pushed, crimped, bent, straightened, tightened, cut, or pounded — there would be no tool box handy — so he would pull out his tool and do the job. He swears by it and is seldom without it.

We have given them as gifts to friends who also enjoy being together.

One hint — make a leather sheath to hold tool when you're carrying it in your pocket (to avoid catching on furniture and upholstery.

Jan V. Tiura
Moss Beach, CA



Fire Without Matches and Books

A browseful hour spent with the WE catalog indicates that some readers are on the fire-without-matches kick. For what they're worth, a few suggestions:

Ordinary household steel wool, of the kind available in any grocery store, is the best tinder ever invented (if you really want to go first cabin, get the extra-fine kind that cabinetmakers use). Scratch a spark into a small glob of steel wool and watch it glow! Wrap the steel wool in a fist-sized glob of dried grass (say), blow on it for ten seconds, and presto! Instant fire.

And where do you get the sparks for the above process? From a cigarette lighter, man! A cheap cigarette lighter, used without fuel, provides an excellent source of sparks. Some spare flints can be carried inside the lighter, down where the cotton filler is located, and you have a lifetime source of sparks — so much handier than a hunk of quartz and a broken file. Of course, you can fill your lighter with fluid if you want, but that takes all the fun out of it . . .

And now a real survival item: the reflector in a flashlight (headlight, etc.) can start a fire for you on a sunny day. Simply take your flashlight apart, aim the reflector toward the sun, and poke a bit of tinder up through the hole where the bulb fits (a cigarette works fine), extending it no more than half-an-inch (less may work better) and, presto! again. (You don't actually get fire this way; what you get is a lighted cigarette which, with patience and tinder like steel wool or dry grass should make fire for you. . .) This, of course, is an adaptation of the "Solar cigarette lighter" that was common in novelty shops a few years ago.

There are a couple of discount booksellers which readers of the Whole Earth Catalog might be interested in knowing about:

> Publisher's Central Bureau
> 32-20 Hunters Point Avenue
> Long Island City, New York 11101
>
> and
>
> Marboro Books
> 131 Varkck Street
> New York, New York 10013

Both these firms deal in publishers' reject books — those which didn't show a profit on the stands and which are being sold at a reduced price to clear the shelves. Best-sellers of a year or so ago will be priced at 1 to 2 dollars; big pictorial items originally in the 10-15 dollar bracket will be reduced to 3-5 dollars, and so on.

Both companies publish catalogs and both deal mostly by mail, although they take a while to fill orders. I've tried enclosing postal money orders rather than personal checks with my orders, but that doesn't seem to speed things up any . . .

Joe Smith
Hood River, Oregon

I HAVE A PROBLEM. –

Hi Keith,

I have a problem and need some consultant help. I want to remove a concrete silo 45' high and15' in diameter. It is constructed with precast sections, 1'x2'x3-1/2", no reinforcement, with a tongue and groove on the sides. These sections are staggered up and down 1 inch to interlock them. Steel bands 3-1/2"x1/8" circle the tower covering each joint and there are additional bands in the center of each panel for the first 15' of height. The bands are bolted in three sections with 5/8" bolts. There are barns on two sides 25' away. Also many windows that should remain intact.

My first thought was to explosively cut the bolts working from the top down in about 10' sections, allowing the tower to collapse around its base. I tried cutting 5/8" test bolts with five wraps of 50 grain prima cord stacked pyramid fashion. I was able to neck the bolt down somewhat, but I could not cut it. 50 grain was the heaviest prima cord I could get around here.

What would you suggest? My current permit expires August 31.

Fred

– I HAVE A SOLUTION.

Fred,

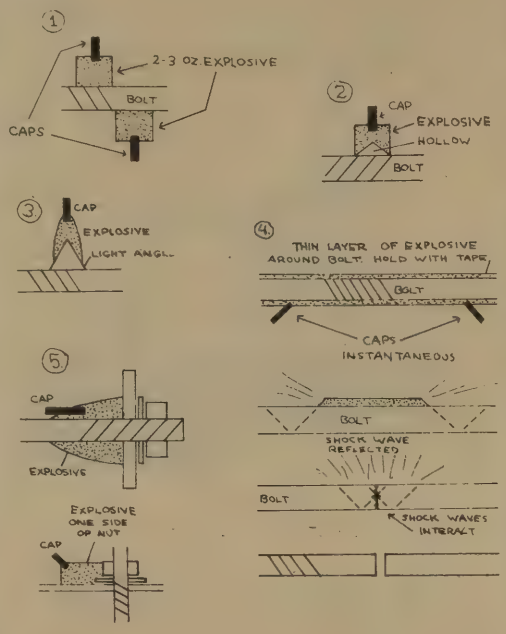
Tower demolition is normally carried out by either piecemeal methods, as you proposed, or more commonly by felling. The latter, in the case of a round tower, involves either the progressive development of a notch until it topples, or where directional control is important, the instantaneous undercutting of 200 degrees of arc leaving the remaining 160 degrees intact as a hinge. This is normally done by piercing the 200 degree sector so as to leave it supported on pillars which are then simultaneously destroyed. The reason for this is the normally high wall thickness to diameter ratio found in the base of chimneys etc., which requires the scattering of rather a lot of material if the possibility of the thing being partially supported by the muck pile is to be avoided, and, much more important, if the possibility of the round 'freezing' is to be eliminated, the 'compression arch' layout being particularly susceptible to this. In your case you are dealing with an annulus so this does not apply to the same extent. It is essential that there be nothing left unbroken though that will not be broken or displaced by whatever fraction of the structure's 40 or so tons bears upon it.

Where a structure is banded it is normal to remove the lower bands to assist breakage of the base. In your case this could not be done as the removal of the bands would be liable to collapse the structure without directional control. I take it that there is no lock on the top and bottom of each segment beyond that obtained by the staggering of the heights of the segments. You would have to use your judgment on the holding power of such an arrangement.

You could then proceed by knocking one of the panels to pieces, (4 oz mudcap in middle) for access and to establish the charge for adequate breakage, followed by either the removal of a few more to make pillars or the immediate firing of a round calculated to leave an effective undercut (i.e. 28 panels the remaining 18 being left as the hinge). Mudcaps should do this OK but if you wanted to be fancy you could play the fool with hydraulic action, explosive in big poly bags of water or a lake inside the silo. Obviously you will have to remove at least one band, equally obviously the more the better – SO LONG AS THE HINGE IS NOT THEREBY SO WEAKENED THAT IT COLLAPSES BY BUCKLING BEFORE THE THING HAS BEGUN TO TOPPLE.

General principles of dropping such structures require that you meet at least one of two conditions. You must ensure when destroying a structure by removal of supporting parts THAT WHEN THE REMAINDER LIMITS ON ITS UNDAMAGED PORTION either it is in a negatively stable condition (e.g. C.G. outside base) or that it possesses sufficient kinetic and potential energy to progressively destroy the stressed parts. Otherwise it will sit and look at you a few feet shorter than it was before and you will look, and feel, exceedingly foolish.

To ensure the former you would need to attack more than one level of panels, but you are limited on that by the need, particularly with pillar tactics, to avoid premature collapse, maintain the integrity of the hinge and limit the weight of explosive employed. It would likely be better to take positive action to disrupt the bridgeing action of the segments over the next three levels to ensure progression of the collapse.



To cut the bolts you would need ca. 6 oz charge distributed to cause sheer (fig. 1) or you could experiment with a shaped charge (figs. 2 & 3) or 'diamond charge' tactics (fig. 4) or attack the heads or nuts (fig. 5). Bear in mind that the segments are locked together and would not just fall off, requiring possibly difficult and hazardous 'scaling' operations to displace them.

Concerning air blast, you are primarily concerned with the 'scaled distance'. This gives you the overpressure at any distance from any charge given the weight employed and the explosive relation to TNT by inspection from tables published in many books. The scaled distance is found from the formula:

Scaled Distance = D/W (D – distance in feet)
(W – weight in pounds)

You will be concerned with threshold of damage to windows and ears for which the following abstracts should serve:

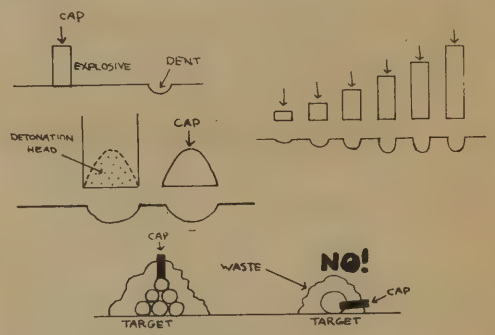
Threshold Damage to	Overpressure psi	Scaled Distance (sea level) ft/lb
Windows	1.0	50
Ears (reflected)	2.3	30
Ears (direct)	5.0	20

Thus for a one pount TNT charge you need to be 50' from the nearest window, for a two pound, only 64'. Allow 20% extra on the weight for the higher velocity nitroglycerine based and for PETN.

The position is complicated by the effect of reflection. Where this occurs the overpressure is locally amplified, often dramatically. Thus if you stand a few inches from a reflecting surface normal to the incident wave you will experience ca. 210% of the incident overpressure from a plane surface. Where it is in any sense concave the amplification may be very considerably higher, in the example given in Pig. 6 the incident wave was measured at (1) at 17 psi, the reflected at (2) at 700 psi. DON'T SHELTER IN RE-ENTRANT ANGLES!!!

As you will gather from this you have little worry regarding windows with any charge you are likely to want to use for bolt cutting. You can further minimise risks by opening windows, and claims by careful examination for cracked panes BEFORE blasting, Further, shock waves are quite directional, at close quarters highly so, so if the nearest sensitive area is appreciably out of line the overpressure will be greatly reduced. The attenuation round an obstacle is so great that you could probably quite cheerfully fire 50 lbs on one side of your silo without worrying about a window on the other.

Mud packing or surface charging in general, it is well to take care to use the 'detonation Head' to best advantage. This is the only usefully used explosive in such charges, and should be maximised for economic and noise reasons. The best example of this is to consider sticks of explosive end on to a metal target. As the length is increased at first the dent depth increases, then, when the length reaches between two and three column diameters, remains constant. In the diagram below the dark shaded cone is the only part which is usefully employed and this is borne out by the fact that a cone of that shape produces an almost identical crater. The moral of all which is that it may pay to recartridge or use without wrapper and mould to an efficient shape and will certainly pay to take care to position the cap so as to get the maximum explosive between the point of initiation and the target.



N.B. Don't get nitro on skin – wear gloves.

N. very B. Ensure good contact between explosives and target. One layer of paper equals approximately 20% loss in efficiency.

Keith
England

(I hope to attempt the silo before the end of August. Results and maybe pictures in next sup. – Fred)

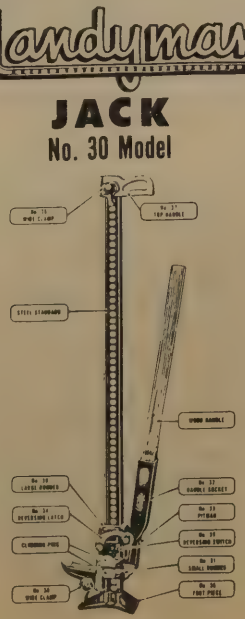
HANDYMAN JACK

Basically the Handyman Jack is a super heavy duty bumper jack but it bears no resemblence to the inadequate things that Detroit supplies with their inadequate automobiles. It weighs 28 pounds, has a capacity of 3 tons, is four feet tall, and has a lift of three feet. The jack is guaranteed for 18 months, and complete repair parts are available should they ever be required.

I've used mine for lifting my truck, stretching shrunken plastic water pipe, and a number of odd lifting and spreading jobs, and wouldn't part with it for anything. I paid about $28 for mine a couple of years ago; I don't know what they might cost now. Sales and information can be had direct from the manufacturer:

Harrah Manufacturing Company
46 West Spring Street
Bloomfield, Indiana

[Suggested by Douglas Canning]

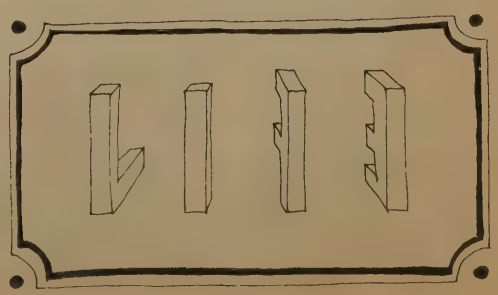


Vinyl Cements

I have been developing a portable, collapsible, insulated shelter in which I have been using a nylon reinforced vinyl requiring a suitable adhesive.

I would like to advise the person who refers to himself as the 'Virginian' in Pax River, Maryland that Bostik Adhesive Specialists, a subsidiary of USM Corp. in Middleton, Mass., produces an excellent adhesive for vinyl. It is referred to as 4067 a nitrile rubber base adhesive and 7130, a synthetic resin base. Both are excellent and are often used industrially for vinyl inflatables.

James W. Smith
Providence, R.I.



WARNING: Beware of handle, or EAT TEETH.

Screw Appreciation

You will see by my enclosure that the subject of this letter is screws. Since this is probably too commonplace a title to attract much attention lets call them fastening devices. This particular device is a combination of so many improvements on the standard wood screw that I'll be surprised if someone else hasn't brought it to your attention. In case no one has, here goes.

It's a Sheet Rock Screw. They are made to attach sheet rock to metal studs. They are designed to be driven with a power screw gun. They can be driven by hand, of course, and in fact are easier to drive than ordinary screws. Ideally, however, one should use a good quality variable speed and reversable drill. In the hands of the woodworker the applications are unlimited.

To appreciate the screw, one must break it down to its components:

1. It has a self tap point. No awl is required to mark the location and keep it there. It zips into wood or thin metal.

2. There are two threads. The hi thread is at 30 degrees instead of the normal 60 for faster penetration. The lo thread reduces wobble and provides lateral pressure.

3. The shank is reduced in size giving greater thread exposure and gripping power. I'm told that it holds better alone than the same number of regular screws and glue. My experience with them seems to verify this, but I can't prove it. The narrow shank also eliminates the need to pre-drill in all but the hardest woods and thicker metal. There are minimum splitting problems.

4. The finish is an attractive gray created by a zinc phosphate coating with baked-on linseed oil. It is supposed to be corrosion resistant.

5. The head is a patented shape called "Bugle" head. For the woodworker, the advantage is no countersinking. It pulls down flush with little or no surface damage.

6. The slot is a #2 Phillips, the advantages of which are well known. The pros use magnetic bits and don't even hold the screw to guide it as it's being started. The steel they are made of is so tough it's almost impossible to damage even the appearance of the slot with a spinning power bit.

7. Since the awl, drill and countersink have been eliminated, the speed in driving with power or by hand is obvious. They are equally easy to extract if you make a mistake, want to disassemble your work and/or salvage the screws.

If the above sounds like the manufacturer's sales pitch, it is. I copied most of it from the specifications, omitting the many other advantages that are probably only of interest to the sheet rock people. They are made by U.S. Gypsum Company, 101 S. Wacker Drive, Chicago, Illinois 60606. They come in various lengths and styles. There are variations for plastic, trim, sheet rock to wood, and a plain point for wood only, to mention a few.

After using them, their superiority is so apparent that one feels cheated if he has to use the old kind again. If all this is so, why isn't everybody using them? Why can't you buy them in the neighborhood hardware store? I don't really know. Anyway, I get mine at a building materials supply house that specializes in sheet rock, lath and plastering supplies, etc. They cost between $8.00 and $22.00 per thousand. I don't recommend them for the novice or occasional do-it-yourselfer. But for the guy who is "always building one thing or another" they are fabulous and worth obtaining. Instead of being the specialized fastening device they were designed to be, they are damn near universal. The only place I would hesitate to use them would be on a job where shear was important, such as a gate hinge.

Fred Barrett
Portland, Oregon

Go-Jo NO-LOK

The counterpart to Loctite. Anyone who has ever put a machine back together in imminent fear that the garped-up old threads are going to jam & that he's then going to twist the head off a bolt, or anyone who has ever had to apply lots of Liquid Wrench & swearing to get a bolt off will dig it. You put it on the threads of a bolt and that bolt just slips in and won't ever lock up. I was amazed the first time I used it; makes bolts feel like brand-new. I'm not sure if it makes things more prone to coming loose from vibration — in motorcycle applications it may be best to use lockwashers or safety wire.

Price varies; my father paid 95¢ for a little can; I paid $2.00 for a really big one. Best obtained through auto parts supply houses. A little hard to find; in some places contacting jobbers or distributors may be necessary.

Bill Houghton
Fairfax, CA

Another brand is Never-Seez. *Fred.*

The P-38

The P-38 (or GI can opener, as surplus store owners tend to refer to it) may well be the highest point to which technology has ascended and is certainly an indication of the direction in which it should be headed — away from complex, flashy gimmickry and onward into simplicity and reliability.

It weighs no more than a nickel, takes up less room than a key (I always carry mine on my keychain; you never know where your next can's going to turn up), has a breakdown factor of 0, gets better with time (as all good things should), and, should you be unlucky enough to lose it, can be replaced for just 9¢ ($.09) at the going rate.

Within my admittedly limited experience, it has also served as an effective, if frustrating, fishhook, a reasonable facsimile of a knife-point, a tack remover, and a superb toothpick (though my dentist would probably flip his fillings if he heard me say that).

Invest a dime, slip it on your keyring (or lovebeads, depending where you're at) by means of the thoughtfully-provided hole (it was originally meant to go on a dog-tag chain), try to forget its militaristic ancestry, and never, never be without it.

Note on can-opening with the P-38: Do not open the entire lid; leave a piece attached, fold the lid back, bend it in half, and you have a backwoods coffee cup, soup bowl, water glass, etc.

Eliot Wald
Chicago SEED
Chicago, Illinois

SNOW PROOF

"Leathers Best Friend" makes leather like rubber (almost) for about 3 days.

Available from the Snow Proof Co., Livonia, N.Y. About 69¢.

[Suggested by Peter]

RECOMMENDED

Product Development and Design monthly magazine, 200–400 items reviewed descriptively each month, 600 or so ads for unusual items related to developing all sorts of products. Info and samples are available on check-off card type access system. Subscription free to qualifiers which must mean anyone in any type research; they sent it to us and we seem mainly to be researching our own heads and we didn't ask for it. It is really a mind blow for the "mechanically inclined" or short-cut freak. In the last few years everything you ever thought would be a helpful little gadget or variation has been manufactured and is available. This is one place you'll find out about it. Especially if it's new. It must be invaluable to investment freaks cause it's good access to technology's rate of growth and the movement or dynamics of it in the small item part of the spectrum. It really seems to supplement the Thomas' Registers and is full of useful stuff often available in sample form for free or a small charge to stimulate use of the item and a market for it. Product Design & Development, Bala-Cynwyd, Pa. 19004. Reader (subscriber) qualifying application form on request.

Recommended by
Ron Williams
ONYX
New York, N.Y.

ELLIPSE COMPASS

Accurate to 0.005 in.; any angle to 90 deg.

Accurate within 0.005 in., this compass draws ellipses at any angle from 0 to 90 deg. It draws from ⅛ up to 12 in. on the major axis, and up to 6 in. on the minor axis. It also draws circles up to 6 in. diameter.

Constructed of aluminum, chrome, and Teflon, the compass works in ink, pencil, or scribe. Each compass is accompanied by a meter which helps you to set the legs quickly.

For additional information, write or telephone J. E. Holmes, V.P., Ellipsco, Inc., 7990 Dagget St., San Diego, Calif. 92111. Area Code 714, 279-5142.

Circle #494 on PD&D postcard enclosed.

Cheap and Speedy Finish

SPEEDY FINISH A penetrating wood finish developed by the U.S. Department of Agriculture is applied super-fast with a weed sprayer. It makes up in a gray-green shade only, but can cover a barn in two and a half hours, costs just 51¢ a gallon to compound. Researchers estimate that it will protect wood for four years. It's recommended for fencing, summer cottages and other structures built of low-grade lumber. The product isn't available commercially, but you can have the formula free of charge. Write the USDA Forest Products Laboratory, Madison, Wisconsin 53705 and ask for: Research Note FPL — 0134, "Experimental Chromate Finish."

I found this bit in 'Woman's Day'. May ECF would make a community look like a gray-green prison compound, but it sounds cheap and good. Worth looking into?

Dorcas Hebb
Bridgton, Maine

ANIMALS BEWARE

The Raymond Thompson Co. of 15815 2nd Place West, Alderwood Manor, Washington 98036, makes a line of excellent steel snares designed for use on anything from squirrels and rabbits to grizzly bears. The No. 00 size is perfect for small stuff like rabbits, and the No. 0-XX-30 inch size, just a little bigger, is fine for slightly larger animals. Thompson packages these two snares together along with some interesting material on rigging snares, traps, drowners, etc. These are quite inexpensive, even the big snares for grizzlies run only $4.00 each.

Bill Kirby
Portland, Oregon

Food and Ways

Vegetables, Cooked or Raw

Two very excellent vegetarian cookbooks not in your Jan. WEC listing:

Vital Foods for Total Health — A Cookbook & Kitchen Guide by Bernard Jensen, D.C.

Dr. Bernard Jensen Enterprises
2958 West 7th Street
Los Angeles, CA ($4-5 range)

Ten Talents by Dr. Frank J. Hurd, D.C. & Rosalie Hurd, B.S.

The College Press
Collegedale, Penn. 37315 ($7.50)

Perhaps the best vegetarian cookbooks currently in print. Both well grounded in nutrition and bio-chemistry with vitamin-mineral charts, food classifications, value & use of herbs in food preparation and hundreds of recipes from drinks to desserts. Both nicely printed on glossy paper, full-page photographs of foods & prepared dishes, and spiral bound for easy reference — well worth the rather high prices.

For anyone interested in simplifying the simple life — elimination of stoves, pots & pans and most kitchen utensils, I heartily recommend a "Raw Food" dietary. It's delicious, nutritious, 'nodishes' trip. Seriously, more and more nutritionists, biochemists and even M.D.'s are claquing about the health value of enzymes in the total body economy and recommending raw foods as the best sources of these essentail chemical substances so readily destroyed thru oxidation and cooking. Here are a few among the best NO-COOK books available which give the rationale of unfired food and endless recipes. (These are for the neophytes and gastronomes; advanced raw food freaks need no recipes — food is simply eaten out of hand with little or no preparation other than washing and peeling when necessary.)

The Elixir of Life by Arnold De Vries ($3.00)

Harvest House, P.O. Box 5, Pacific Palisades, CA

Vital Facts About Foods by Otto Carque ($2.00)

Kahan & Lessin Co., 2425 Hunter St., Los Angeles, CA

Diet & Salad Suggestions by N.W. Walker, D.Sc. ($2.00)

Norwalk Press, P.O. Box 13206, Phoenix, Ariz.

Cook-less Recipes by Shirley A. Boie ($1.00)

Boie Enterprises, P.O. Box 66235, Los Angeles, CA 90066

The No-Cook Book by John Tobe ($10.00!)

Tobe's, St. Catherines, Ontario, Canada

Fruit Dishes & Raw Vegetables by M. Bircher-Benner, M.D. & Max E. Bircher, M.D.

Children's Diet by M. Bircher-Benner, M.D. (About $1.00 ea.)

both from: Health Research, Mokelumne Hill, CA

Dyana Lu
New London, Conn.

Soybeans

Dried soybeans (complete vegetable protein and delicious) do not need overnight or any soaking (nor does any other kind of dried bean or pea that I know of). I have been rendering them perfectly tender by cooking one or two handfuls in the pot with 2 cups of rice (brown) and a bit less than 4 cups of cold water — all brought to a boil and simmered for 40 minutes. This works with our homegrown soybeans, storebought soybeans, yellow peas, azuki beans, chidk peas, lentils, Jacob's Cattle beans, black beans, and undoubtedly others.

Specialty Foods as per January Catalog is not at W. Houston Street, but at 84 Thomas Street in N.Y.C., and they do not sell 100 lbs. of rice for $15 and never did. They are a wholesale outfit and prefer not to fill orders of less than $100. As part of a large order they will sell 120 lbs. of rice for $25.20, which is still a good price. We were there today. A catalogue is coming out soon.

Susan Custh
Berlin, Connecticut

Spear Fishing

For $125 I have been feeding our entire community of eleven adults and four children. $125 will buy you an entire spear fishing outfit at Steeles (Telegraph, Oakland). For vegetables, flour, dope and whiskey I trade my surplus. To learn, find somebody who is an expert diver and apprentice yourself. I'm available for advice.

Alan Graham
Caspar, CA

Brown Rice Rides Again

Tried to get 100 lbs. of Koda Brothers brown rice from the N.Y. distributor listed (Sol Rabinowitz) —

1) address has changed — however —
2) no good anyway, since they won't sell you 100 lbs., only to retailers.
3) How do you get rice from a wholesaler? How do you get rice at a wholesale price?

Mike & Carla Mantler
New York, N.Y.

As a result of your listing my name and address in your catalog as a source for Koda Brothers Brown Rice, I have been bombarded with requests for information and orders ranging from 2lbs. to 100 lbs. of this rice.

Just to straighten you out, please be advised that I am Bill and Ed Koda's New York representative for the sale of their products to the WHOLESALE DISTRIBUTING trade only. These people supply retail stores and may or may not sell to consumers, depending on the quantity involved. In addition to Erewhon Trading Co. of Boston, whom you also list, the wholesale distributors in the East are:

Mottel Sugar & Bakers Products, Inc.
451 Washington Street
New York, N.Y. 10013

Japan Food Corp.
11-31 31st Avenue
Long Island City, N.Y. 11106

Infinity Foods
171 Duane Street
New York, N.Y. 10013

L.E. Robert Company
792 Union Street
Brooklyn, N.Y. 11215

Please make the necessary corrections in your subsequent catalogs because writing to me is a waste of time on the part of your readers and my time in replying to them. Thank you!

Sol H. Rabinowitz
Jamaica, N.Y.

P.S. May I add that the price of $12.20 is misleading as we get much more from the wholesale distributors in the East.

See p. 52 for a short rap by Fred about wholesale buying.

All About Food Plants

In the past, I've been a student of ecology, mushroom hunter, herb grower, and now I'm doing some organic gardening. Here are some more suggestions from those realms.

My favorite book is *Plants, Man & Life*, Edgar Anderson, U.C. Press, Berkeley, paper, $1.95. Oriented toward economic botony, or, how did food plants get domesticated and what can we learn from this? "Suggested Readings" at the end is a beautiful bibliography. I went through as many of the books as I could find in the Bay Area, but unfortunately very few were available in libraries, even U.C. and the California Academy of Sciences. Particularly valuable would be Carl O. Sauer's *Agricultural Origins and Dispersals*, originally published by the American Geographical Society, N.Y., 1952. I called Stacey's about it and they say it is in paperback by M.I.T. Press, $2.95. Also Oakes Ames (Anderson's teacher), *Economic Annuals and Human Culture*, Botanical Museum of Harvard University, Cambridge, 1939.

You don't seem to have mentioned any taxonomic manuals — or have I missed something? I use Jepsen (*A Manual of the Flowering Plants of California*, U.C. Press, $10), and, for cultivated plants (like in flower gardens, or crops growing in fields), Liberty H. Bailey, *Manual of Cultivated Plants*, MacMillan, $19.50. Taxonomy is a very useful tool — with it you can identify any plant anywhere, and once you have the name can find out about it in literature. Or if you have the correct description (taxonomy is based on describing certain features about a plant that distinguish it from other plants) you can talk about a plant with people who may know it by a different common name (in a different language, say) than you do. Mushroom books also describe taxonomically. Another California manual, and newer than Jepsen, is Munz (ed. Keck), *A California Flora*, U.C. Press, $11.50. This manual is the basis for the smaller Munz books on identifying wildflowers of different regions. I'm fonder of Jepsen myself.

The taxonomic method is rather arbitrary, since it is based on often non-essential characteristics of plants as means of differentiating them. It has as an adjunct an extensive system of herbariums all over the country, where dried plant specimens, properly identified, are kept for reference. People who know plants only by dried specimens get kind of weird (this is discussed with humor in Anderson's book). But it's still useful. For example, I think it's a very good idea when settling on land to do a plant survey. This tells you about what kind of land you have (certain plants are indicators — see Joseph Concannouer's *Weeds*).

It is difficult — in some cases almost impossible — to learn from a book. I took a summer field course at U.C. in basic taxonomy and learned to identify about forty families of plants by sight, and their species either by sight or with a manual, in ten weeks. High school teachers and people attached to State and regional parks can help, could even be persuaded to teach a group if enough people were interested. My textbook was Lawrence, *An Introduction to Plant Taxonomy*, MacMillan.

Your coverage of mushroom identification books is fine, but I have graduated from Smith and McKenny (both of which I have) to *A Guide to Mushrooms and Toadstools* by Morten Lange and F. Bayard Hora, Dutton. It is very complete and has color painting instead of photographs, which I like, and every species is shown in color. I belong to the San Francisco Mycological Society and I recommend that anybody who is interested in mushrooms join the nearest mycological group for help with locating and identifying. Write to the North American Mycological Association, 4245 Redwood Road, Portsmouth, Ohio 45662, for the address of the nearest group. There is also a mail-order bookstore which has everything about mushrooms (and also many books on plants, and some assorted other scientific subjects): Lew Heymann, P.O. Box 6448, Carmel, Calif. 93921. His catalogs are free and fantastic.

Now, about herbs. Many of your readers have groppled nobly with the problems, and I concur with the reader who suggested Greene Herb Gardens. I also recommend Taylor's Garden, 2649 Stingle Ave., So. San Gabriel, Calif. They ship plants, at least in California. One of the organic seed places has more than the usual herbs: Vita Green Farms, P.O.B. 878, Vista, Calif. 92083. Other organic seed houses: Natural Development Co., Bainbridge, PA 17502; George W. Park Seed Co., Greenwood, S.C. 29646. This last doesn't look organic to me but is recommended by my teacher in organic gardening, Dr. Bargyla Rateaver (who is teaching a couple of courses through U.C. Extension and also at high schools in Marin County, plus lectures on KPFA — which have already been broadcast but we are trying to get KPFA to repeat them). Park also has quite a few herb seeds. Vita Green is worth writing to for a yellow sheet they send to you with the seed list, called "A Report on the Death of Earth's Civilization, Interspace News Dateline May 10, 1995."

Finally, organic gardening. Dr. Rateaver welcomes letters and will answer questions. She is trying to be a one-woman green revolution. She lives at 8 Stadium Way, Kentfield, Calif. 94904. She also sells things — fossil fertilizer called Clod Buster, liquid seaweed extract, and so on. She has been ordering books for us and has turned us on to the publications of the Bio-Dynamic Association. These are people who make biological preparations for all sorts of jobs — compost inoculant, field spray which hastens decomposition of cover crops turned under for "green manure", insect retardents, growth stimulating sprays, and so on. Some people are doubtful whether the preparations are more effective than regular organic methods, but the Bio-Dynamic people sure know a lot about plants. Pamphlets and books are available from Bio-Dynamic Farming and GArdening Association, Stroubsburg, PA 18360. Also a quarterly magazine. I have just bought *Companion Plants and How to Use Them* by Helen Philbrick and Richard Gregg, Devin-Adair, $4.75. This is about plant interaction, ecology in home gardening. Single stands of one plant are unknown in nature and have only come in with intensive farming, where man has usurped the land for his own selfish ends. He has paid for his arrogance. What we have to do now is work towards setting up ecological communities when we want to grow food plants.

Sent by

Mary Schooner
San Francisco, CA

Yogurt

Here it is! The definitive yogurt recipe, courtesy of Consumers Cooperative of Berkeley, Inc. No special equipment, no watching the pot for hours & fussing about keeping it a special temperature – except for a few minutes every couple of hours for 6 - 8 hours. The recipe first appeared in the *Co-Op News* about 2 years ago, and I have been using it ever since with delicious success:

Equipment:
- 4 - 6 pint jars (I use tall thin jars, or almost anything)
- 1 large mixing bowl
- 1 heavy pot to hold the jars (I use an aluminum bucket from a camping kit)
- Candy thermometer

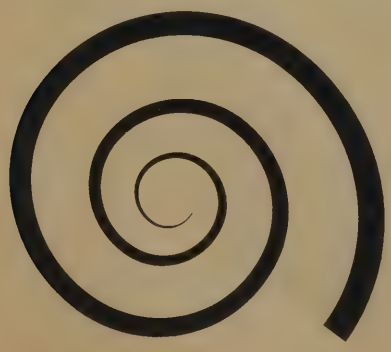
Ingredients:
- 1- 8 oz. container plain yogurt
- 1 large can evaporated milk (NOT condensed)
- 2 cups non-fat powdered milk
- 5 cups almost hot water

Instructions:
- Thoroughly blend yogurt & evaporated milk in bowl.
- Thoroughly blend powdered milk and water and add to bowl.
- Mix all well and pour mixture into jars using a ladle. (I use a cup.)
- Place jars in pot, add hot water to near top of jars and place candy thermometer in water between jars.
- Place pot on stove & cook until temperature registers 125 degrees. Turn off. Do this three or four times at 2-hour intervals. Caution: do not leave stove while heat is on; higher temperature can ruin yogurt batch. (Don't panic if you forget, though. Take jars out of water & pot off heat until thermometer registers 125. Return jars to water.)
- Leave pot on stove, over pilot if you like, until morning. Taste. For a more tart yogurt, leave on stove a few hours longer.
- Remove jars from water, cover and chill in refrigerator.

After making this one batch with store-bought, you can use this yogurt as starter. This first recipe, which makes about a quart or two, costs about 55¢, thereafter about 25¢, depending on how much you have to pay for the milk. The recipe was headlined as "foolproof" when it appeared first in the *News*, and I believe it, since I've only managed to ruin it once in 2 years of careless cooking – by allowing the temperature to climb to 150 degrees all four times I heated it!

V. Manchester
Fortuna, CA

Paul Goldstein showed us the best yogurt-maker we've seen yet. It's just a quart mason jar with lid, with one-inch foam rubber wrapped around it, and circles of foam cut out to cover the top and bottom of the jar. You just get one quart of your yogurt mixture to the right temperature (he recommends 110° F.), put it in the jar, wrap it up, and put it someplace quiet for about eight hours (like inside an un-lit oven overnight).



Sourdough Cookery

You can get Sourdough Starter from:

Sourdough Jack's Kitchen
603 Tennessee Street
San Francisco, CA 94107

The Cookery Kit – includes cookbook and a package of starter. $2.30 postpaid.

Gift Package – includes cookbook, starter, and a sourdough crock. $4.80 postpaid.

The Fish Protein Story

"Instant Protein" the first FDA-approved food grade fish protein concentrate to appear on the market will be available to household consumers in mid-May.

Alpine Geophysical Associates, Inc. manufacturers of Instant Protein say they plan to market the product initially in New York and New Jersey supermarkets, and branch out into New England later.

The light colored powder, packaged in half-ounce envelopes, eight to a package, has only a faint aroma of fresh fish, its makers say. Blended with many foods, it adds no fish flavor, but fortifies them with animal protein at a low cost per serving.

Consumer testing of Instant Protein has shown that it blends successfully with flour products, such as cakes, breads, rolls and cookies, and with rice products. Mixed with these materials at about the ten per cent level, it produces almost no change in basic cooking characterisitcs. In most cases, all that is noticeable is a slightly intensified color.

The powder can also be added to a basic spaghetti sauce, its makers say, to produce meat-type sauce stock that provides about half a person's daily animal protein requirement for around six cents.

from:
New England Maritime Resources
Information Program
University of Rhode Island
Narragansett, R.I. 02882

sent by:
John McClaughry
Lyndonville, VT

In answer to Don Symons – concerning high protein fish flour: It was being made by Alpine Assoc. (name may be incorrect) in New Bedford, Mass. under contract to U.S. Gov't. They couldn't get enough fish (the fish are scarce, the weather was awful, etc.) so they only produced about 3% of what their contract specified. Also, if I remember correctly, they had problems with sterilization and making the stuff palatable.

Mrs. Everett Jones
Mystic, Conn.

Snail Safari

Gardeners who have recently converted to gardening without poisons probably haven't figured out yet what to do about the snails. Why not eat them? Instructions for hunting, fattening, cleaning and cooking snails are available from *Sunset:*

"Gourmet treat . . . escargots"
Sunset Magazine, May 1961, pages 190-192
Lane Publishing
Menlo Park, California

We prepared a herd or 72 and therefore found a 5 gallon can discarded by a restaurant a suitable cage. We were not enthusiastic about putting 72 snails back in their shells, only to remove them again at the dinner table. We served them over rice.

Incidentally, our motivation for snail hunting was not gourmet taste, but economy. They're free food! We found ours in other people's gardens in the Berkeley flatlands. In addition, we found wild green onions, mushrooms, mustard greens, mint and nasturtium leaves in the same neighborhood.

Mary Fowler
Oakland, CA

Halibut Fillets The Easy Way

Long as we're on maritime things, here's a trick I learned up here in the frozen north where halibut are plentiful. A crusty ol' guy in a cannery showed me the easy way to fillet halibut, that delicacy of the sea similar to a flounder so plentiful in many oceans.

Anyway, get a knife with a long, thin, sharp, flexible blade about nine inches or so in length. Fillet the halibut as soon as possible after it is dead to preserve the flavor so delicate it's otherwise lost. Get a piece of plywood (or something resembling same) about 2-3 feet square, and cover it with a piece of gunnysack or some sandpaper so the confounded fish will stay in one place. They are slippery.

With the cunning of a surgeon, begin on either side of the fish by cutting the meat to the bone lengthwise along the natural curvature of the spine (the fish usually has markings that follow the spine along the length). Next just ahead of the tailfin, cut to the bone again crosswise. Now, with your finger, poke about the head of the fish until you feel where the softer gut of the fish is on one side of the fish, and cut down to the bone just inside the meat part. Do the same on the other side of the same side of the fish (i.e., on the "top" of the head. This may sound silly, but the fish has eyes that have moved all over its body in the course of evolution). Some of the best and thickest part of the meat is on the upper, or "top" side of the head, so use care.

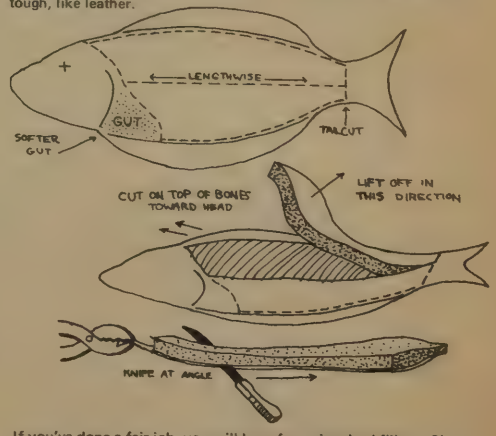
Now, starting from the tail end, work your knife into the lengthwise-cut so that you strip the meat away from the bone toward the head; work your knife in short, easy strokes until it lies nearly flat on top of the fish. This does two things at the same time; one, you will waste absolutely no meat, and two, the bones of the fish will not be left on the fillet. The entire bone structure of the fish will be left intact if you are careful. As you work your knife, slice outward towards the edge of the fish, cutting the skin free at the edge. Working towards the head, the smaller bones will begin to raise upward in the area near the gills and near the larger spine; there is also some cartilage in this area.

Do the same with the other side, until you have two neat fillets separate from the fish. Do exactly the same on the reverse white underside of the fish; you will end up with four neat fillets. If you are careful, you'll not have spilled a drop of blood or guts; the sac containing the guts should remain intact. The underside fillets will usually be a bit thinner than the others. Now discard the remaining skeleton, guts and head over the side for the sharks to choke on. Some people like the halibut "cheeks"; soft, delicate and very small pieces of meat on the outer part of the gills. Personally, I don't think they are worth the effort.

Generally, I've found that the remaining fillets will be about 60-70% of the gross weight of the fish. The size of the fish seems to affect the taste not at all. I can detect no noticeable difference in taste in a fillet of a small fish or a large fish. The larger fish fillets may be of a slightly grainier (stringier?) texture. The larger fish fillets of a really big fish can be cooked nearly like a roast.

Getting back to filleting; you should now have four fillets with skin on one side (unless you have a very quick cat). This is where the real art come in, and the most difficult part to master. In your left hand, take a pair of pliers (visegrips are the best) and grab hold of the smaller (tail) end of a fillet so that the skin side of the fillet is down (next to the board). Double over the skin if necessary to get a good firm grip with the pliers in your left hand.

Now, with the knife at about a 30-40° angle to the board (away from your body! safety first!), literally rip the skin slowly from the meat, preferably in one or two easy strokes. This takes some muscle. It helps if the handle of the knife is pushed forward slightly ahead of the tip. There should be a very distinct and definite "ripping" sound as you do this. It takes some practice to do it really right, but you should master it in a few fish's time. (?). The skin of a halibut is very tough, like leather.



If you've done a fair job, you will have four nice-sized fillets, Clean the blood off them (and you), if any, by holding them under cold running water for a minute or two. Wrap them in baggies or other plastic, wrap that up in freezer paper, and freeze them. They will keep for months without loss of flavor if you can get them in the freezer as soon as possible to preserve the delicate flavor.

Usually, the fillets are so large that they will have to be cut in two or more pieces for cooking (just to get them in pot or pan). They are surprisingly filling, and make great fishsticks, fishballs. Basted with lemon juice, poached and served with a good Hollandaise sauce piping hot, a halibut fillet is a true delight.

Gary D. Christenson
USC&GSS TAINIER (MSS-21)
FPO Seattle

Organic Foods in Texas

Write to:

Green Acres Organic Foods
1338 Westheimer
Houston, Texas 77006

for literature, recipes and prices.

Mushroom Booklet

we wrote:

Information Division
Canada Department of Agriculture
Ottawa, Ontario

and they sent us: **Mushroom Collecting for Beginners**

which has 30 pages and 26 photographic illustrations and it helps us a lot.

This is a very useful pamphlet easily taken to the woods. We identified some oyster mushrooms, watered them (not a good idea as they got too large & kind of tough) & fed 20 people on them last weekend. All agreed it was real fine eating & we owe it all to our little pamphlet.

"For instance it is simply not true that if a mushroom peels it is good to eat. The most deadly species known, the Destroying Angel, which caused over thirty deaths in one season near New York City, peels very readily." (p. 5)

SHAGGY MANE, p. 13. "Mild illness has on rare occasions been reported as a result of eating this species. There is some evidence that this result was associated with the consumption of alcohol at the same time . . . It is fairly common . . . on . . . city dumps."

There are 26 photographs most of which show several angles & types of each species, both edible and poisonous, and it also tells how to take field spore prints.

And they also sent me: my quarter back.

Nan & Randy
Concrete, Washington

New Organic Source

The Oak Ridge Organic Herb Farm, RR #1, Box 461, Alton, Illinois 62002, is a relatively young operation specializing in organically grown herbs, vegetables and flowers. They claim to stock over 150 varieties. They also keep a stock of herbals and books on folk medicine, organic gardening and herb growing. The farm, in Fosterburg, Illinois and the warehouse in Piasa, Illinois (both just north-east of St. Louis, Mo.) are run by the Howes family and friends and they are pretty serious about growing things without using man-made poisons.

They are operating on a shoe-string but are committed to making a go of it. I have purchased seeds, live plants and dried herbs from them and have been completely satisfied. Of course it's worth a trip up there if you can just for the conversation.

The only (quaint) problem is that there is no complete catalog, but as far as I can tell, they will have just about anything you could want between April and July or August.

David Seligman
Alton, Illinois

Yeast

In reference to Mr. & Mrs. Peter Ruppell's question on growing bread yeast . . . Yeast can be grown by first taking 1 cup milk or water and 1 cup flour (preferably whole wheat) and mixing them together in a bowl. Then covering (not airtight) the bowl & putting it in a place where the temperature is between $65^{o} - 75^{o}$. Feed it a little milk or water or honey every day. And in about a week you should have a big bubbly mass of yeast-flour.

Use about 3/4 cup of very bubbly mixture or 1 cup of fairly bubbly mixture.

Add 1/2 cup of milk or water and 1/2 cup of flour and let the whole thing ferment again.

Eric Lloyd
Los Angeles, CA

Wine-Ways

All you need in the way of equipment is a glass jug, a balloon and an enema tube. All ingredients can be bought at your local grocer. This wine can be put together in about 15 minutes and costs about 25¢ a quart.

2-1/2 cups white sugar
1-1/4 teaspoons yeast (Fleischmann's baking yeast is fine)
1/3 cup raisins (boiled in two cups water and then cooled)
2 large tins of Welsch's Frozen Concentrated Grape Juice (try substituting frozen concentrated apple juice)

1. Place the yeast, 1 tbsp. sugar and 1/2 cup warm water in a bowl and let sit until bubbly.

2. Dissolve the sugar in a quart of boiling water. Pour this solution in the sterilized glass gallon jug (you can get these jugs free from your local soda fountain. Their Coca Cola syrup comes in these jugs. So does your vinegar, root beer and apple cider).

3. Allow the Welsch's Frozen Grape juice to thaw and then add it to the jug.

4. Add the raisin and water mixture.

5. Add water to the jug to within three inches of the opening. The final temperature of everything in the jug should be about 100 degrees.

6. Add the yeast mixture and shake to make sure everything is well blended.

7. Get out your 10 cent balloon (a heavy duty one) and fit the opening of the balloon over the neck of the bottle. Secure the balloon to the bottle with an elastic band. The balloon is a perfect substitute for a water seal or other fancy, expensive equipment designed to release the gas produced by fermentation without letting any air in.

8. Let the jug stand in the draft-free, warm (72-85 degrees), dark place (set the jug in a brown paper bag or wrap it in a sweater) for about 3 weeks or until you can see that all fermentation has stopped. There should be no sign of any tiny bubbles rising to the surface when you look through the side of the jug.

9. When fermentation has stopped, sterilize four wine bottles and siphon off the wine (an enema tube works fine). Cork tightly and set the bottles on their side just so that the cork will stay moist and expanded for a tight seal and the yeast can settle to the bottom. Let the wine age for several months in a dark cool (not cold) place. It will taste very good after three weeks but so much better after several months.

Note: Take care when siphoning off the wine not to disturb the yeast sediment on the bottom.

Barbara Kirschenblatt-Gimblett
Bloomington, Indiana

Beermaking, corrected

The "traditional recipe" for *Home Brewed Beer* listed in the March Catalog may be "simple, cheap, and potent," as advertised, but it has several things wrong with it, all of which can be corrected by spending a few cents more on gear and materials.

To start with, do NOT use Fleischmann's — or any other baking type — yeast for brewing purposes. If you do, the beer will have an undesirable bakehouse mustiness. Use brewers' yeast, developed for brewing purposes. You can get this at any brewing or winemaking supply house; check the yellow pages of any large city directory.

Secondly, do NOT use "white sugar", that is, cane sugar. This will impart a winey flavor that doesn't help the taste any. Instead, use corn sugar, which you can get at the brewing supply house mentioned above. Both the brewing yeast and corn sugar are comparable in price to the Fleischmann's and cane sugar — it is simply a question of going to the trouble of obtaining them.

The rest of the recipe for the actual brewing process is O.K. as far as it goes. A plastic trash can (new) works fine, but if you use the traditional stoneware crocks, don't use secondhand crocks that may have been used for pickles, sauerkraut, etc., previously; get new crocks or ones that you know have been used for only brewing before you got them. Also, if you use the crocks, I think it is a good idea to wash them out with a bicarb of soda solution every second or third batch you run through, although this is probably not strictly necessary.

Concerning the recipe's statement that the crocks must be covered with a "shower cap" type plastic cover "to keep the air out", if you think about it for a minute you will realize that the only way you can "keep the air out" is to do your brewing in a large tightly sealed carboy with an "S-shaped" fermentation lock. Some people do, but this isn't really necessary and most people (including me) are not going to bother with this costly and cumbersome equipment. The problem is not with the air getting to the brew, the trouble is vinegar flies and fruit flies that contaminate the brew. So I just put a damp towel over the mouth of the crocks. This has worked fine. My experience also indicates that it doesn't make much difference whether or not you skim off the frothy "head" that develops on top of the brew. What is very important, though, is finding the right spot temperature-wise to do your brewing. About 70^{o} F. seems to be right. If you must do your brewing in a place colder than that, it is possible to adjust the temperature upwards with an aquarium-type electric heater suspended in the brew. But best of all is to find a place with the right temperature to start with.

Although you don't really need one, I like to use a hydrometer to keep track of the alcohol content of the brew in the crocks. This is a little glass gadget you can get at the brewing supply house, or chemical supply houses would have them. You float it in the brew and eyeball the calibrations on the side. If you don't want to bother with this, just look at the brew itself. When the CO^{2} bubbles aren't coming up any more, you aren't getting any more alcohol either, and it probably means the alcohol content present has finally killed off the yeast, ending the fermentation process. The whole process should take about a week. Sometimes the yeast will die for some reason before it should have. If this happens, toss in some more yeast.

When the fermentation is finished, you are ready to bottle. Your bottles will normally be quart bottles, and they must be SUPER CLEAN. It is silly to spend a lot of money and time working up a great brew and then ruin it by putting it in contaminated bottles. A baby bottle brush works well for cleaning quart bottles. Stubbies, by the way, are too small to bother with and you DO NOT CHUG HOME BREW OUT OF THE BOTTLES anyway, for reasons that will be explained later. The recipe said that you should use an "enema tube" to get the brew out of the crocks and into the bottle. What you should use is what is traditionally known as "an Oklahoma credit card", that is, a three foot length of half-inch diameter plastic tubing. Put one end in the brew and keep it above the sediment on the bottom. Suck on the other end of the tube until the brew comes up the tube, lower your end of the tube below the level of the crock to the mouth of the bottle and you are in business. Gravity does the work.

The recipe said to put sugar in the bottles with the brew if you wanted "fizzy" beer, that is to say, if you want beer which is not flat — and that is going to mean most of us in this country. But you should not use a full teaspoonful, as the recipe said — use a quarter of a teaspoonful only, and of course it will be corn sugar rather than cane sugar. Cap with an ordinary capper and it is a good idea to write the bottling date on the caps with a grease pencil BEFORE capping, which puts a dent in them. Now store in a cool dry place where people are not normally about — since you will eventually blow up a few bottles, as we all do, and a one quart bottle exploding can be about like a fragmentation hand grenade. Glass slivers are difficult for a surgeon to dig out of your carcass. Explosions in bottles are the reason we do not use screw top bottles — the other kind will usually just "pop" their tops, but the screw top type bottles must explode if the pressure becomes too great.

The recipe said to let the brew age "4 - 14 days" and "if desperate, drink immediately". This is preposterous, and it is nonsense like this that gives home brew a bad name. Home brew should age at least a month, and anyone who drinks freshly brewed stuff is going to have his intestinal tract reamed out from one end to the other — he will probably be on the toilet all night. Of course, you can get the same problem by drinking properly aged home brew which has been improperly decanted. The problem is this: that quarter teaspoonful of corn sugar you put in the bottle to give it "fizz" converted to CO^{2} ("fizz") and a little extra alcohol — then the yeast organisms floating around in the brew eventually died and settled to the bottom. That is why your quart bottles of home brew that have aged for a month will have about a half inch of sediment on the bottom. YOU DO NOT WANT TO DRINK ANY OF THIS SEDIMENT (that is, unless you have a serious constipation problem you want to solve). This is why you do not drink home brew straight out of the bottle — that way, you can't avoid getting some of the sediment. Instead, you carefully and slowly pour the brew out of the bottle into a PITCHER, and then you can pour glasses from the pitcher. In pouring from the bottle, you keep an eye on the sediment and stop pouring just before the sediment gets stirred up. It helps to have a light on the far side of the bottle, so that you are looking at the light through the brew.

William Kirby
Portland, Oregon

See p. 83, Spring 1970 Catalog, for more on beer and winemaking.

ALWAYS

Whole Thing Catalog

$0

FINDING YOUR PLACE IN SPACE

there are old possibilities which must be reinstated,
there are future possibilities which must be examined.
there are existing possibilities which must be retained,
and there are <u>other</u> possibilities which must yet be imagined.

WE ARE AS GODS AND MIGHT AS WELL GET ON WITH IT.

THE SPACE

the Universe is everything
the milkeway is part of everything
the solar system is part of everything
the sun is part of everything
the earth is part of everything
the animals are part of everything
the plants are part of everything
the birds are part of everything
the fish are part of everything
the insects are part of everything
the Universe is everything
and (we / you) are part of the Universe

THE VOIDS

It is the idea of continuous creation that seems to stick in the craw of most folks. They seem to feel that miracles have no place in the plan of things, but how else do you explain the presence of the things that all ready exist in the Universe? Either it has always been here, or it was created out of nothing at sometime. Either way it involves miracles.....
so go get yourself a miracle.

THE STUFF

the **STUFF** *of the earth is* (one) *thing...complete,*
all embracing
and whole.

Yet each 'earth thing' is involved in a vast and complex system of sharing the energy of the sun among all the diverse and varied life forms (and styles) which make up the whole. There are many life alternatives — but there are rules. Rules which are more like unwritten promises made between things which take into account the (one)*ness of the scheme.*

CHOOSING YOUR PLACE IN SPACE INVOLVES KEEPING **PROMISES**

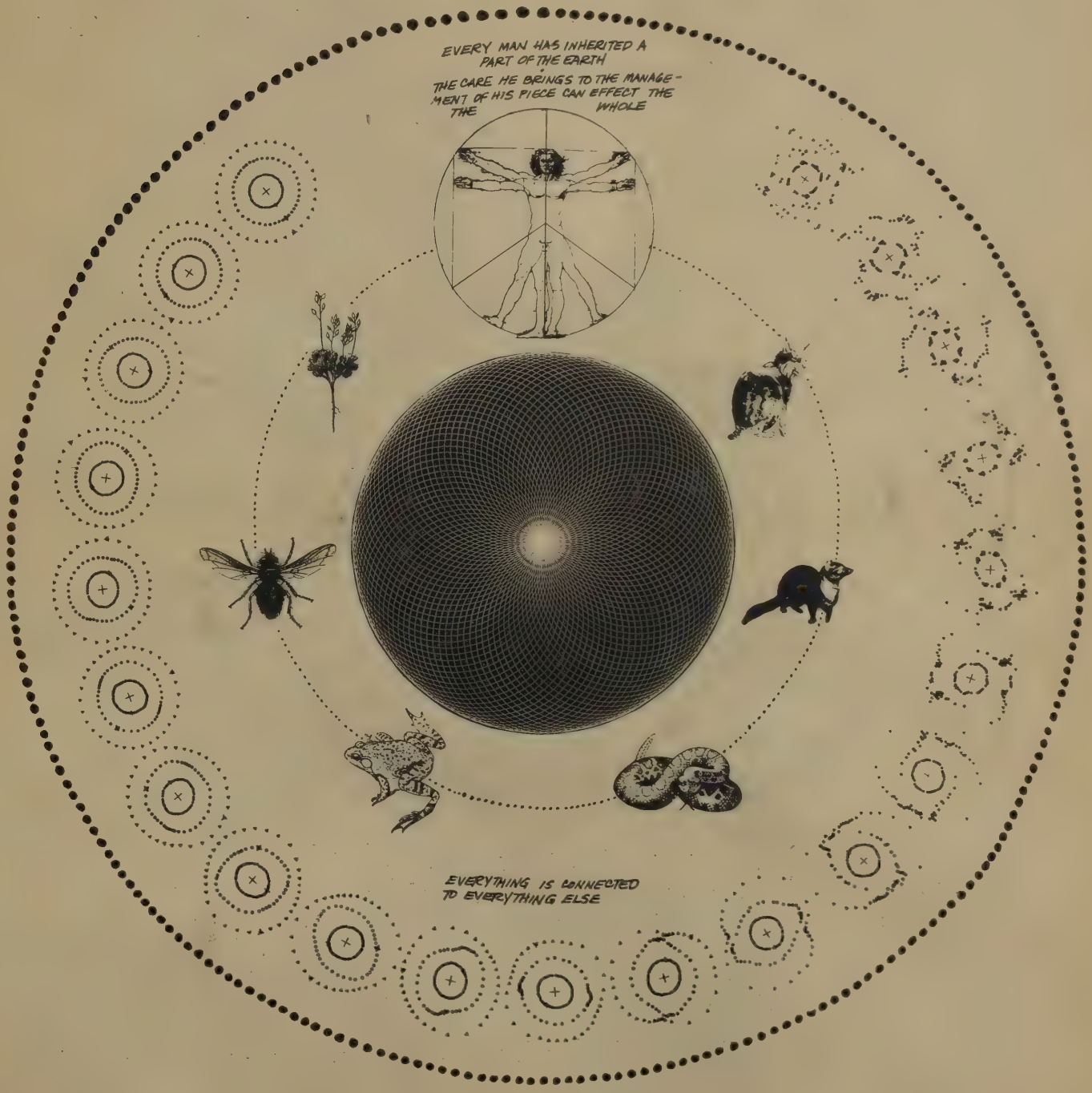
TRAVEL EQUIPT. (head gear)

knowing something about the place helps you find yours

ATTUNE YOURSELF TO THE VIBRATION OF ALL CREATION

INFORMATION GUIDE

knowing how the place works helps you get there



ANYTHING THAT EXISTS IS POSSIBLE

OTHER PEOPLES PLACES

THERE ARE MANY WAYS OF DOING

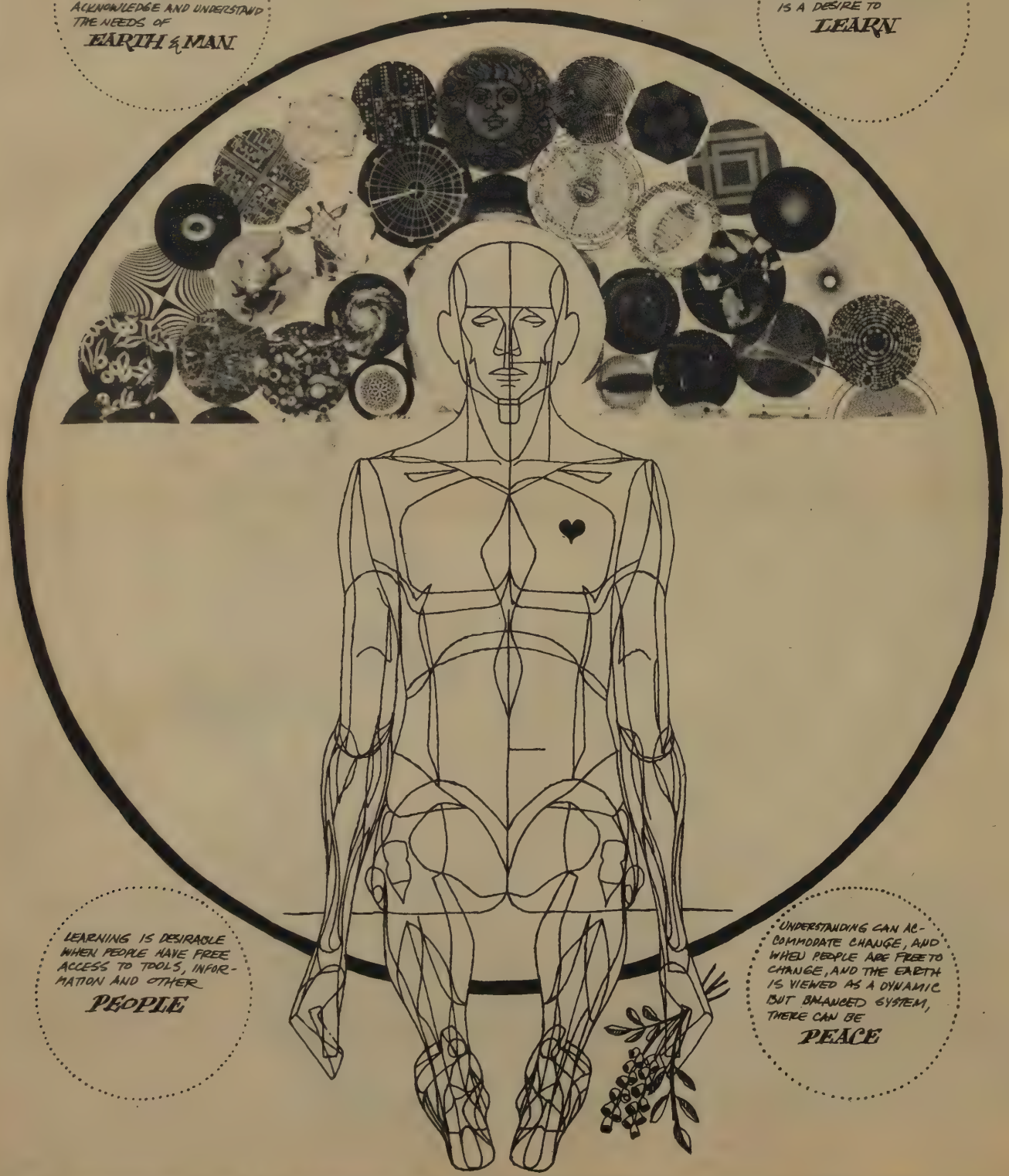
THINGS ..... BESIDES YOUR OWN

GETTING STARTED

knowing something about changing helps you live there

CONFLICTS AND PROBLEMS NEED SOLUTIONS - AND ENLIGHTENED SOLUTIONS ACKNOWLEDGE AND UNDERSTAND THE NEEDS OF **EARTH & MAN**

KNOWLEDGE AND UNDERSTANDING IS POSSIBLE WHEN THERE IS A DESIRE TO **LEARN**



LEARNING IS DESIRABLE WHEN PEOPLE HAVE FREE ACCESS TO TOOLS, INFORMATION AND OTHER **PEOPLE**

UNDERSTANDING CAN ACCOMMODATE CHANGE, AND WHEN PEOPLE ARE FREE TO CHANGE, AND THE EARTH IS VIEWED AS A DYNAMIC BUT BALANCED SYSTEM, THERE CAN BE **PEACE**

THE PURPOSE OF LEARNING IS TO GET FROM WHERE YOU ARE TO WHERE YOU ARE NOT

TRANSFORMATION

PHASE ONE

ANNOUNCER:
The following program is brought to you by the Transformer . . .

RADICAL:
BURN IT DOWN! Only then can we free ourselves to construct a society by, for and of the people. Present institutions have outlived their usefulness; government and society will be rebuilt in the name of and for the good of the people. **NOW!**

ANNOUNCER:
His intentions might work you know . . .

ANNOUNCER:
Our time is the time of urgency (too often, the time of emergency). If we act with care, this sense of urgency can become motivation and result in answer-finding rather than confusion. A place to start is in recognizing the difference between urgency and its imitators: panic and hysteria.

ANNOUNCER:

Creative action presupposes planning. The Transformer is a plan, a way for people to change naturally – a way for society to begin transforming itself in these turbulent days. Consider that everything is irrelevant, except your own life (and some question even that). Only at ground zero can re-evaluations begin.

ANNOUNCER:

Our attempted political solutions, psychological solutions, religious solutions, drug solutions, academic solutions, military solutions, scientific solutions have played out and have

failed

us.

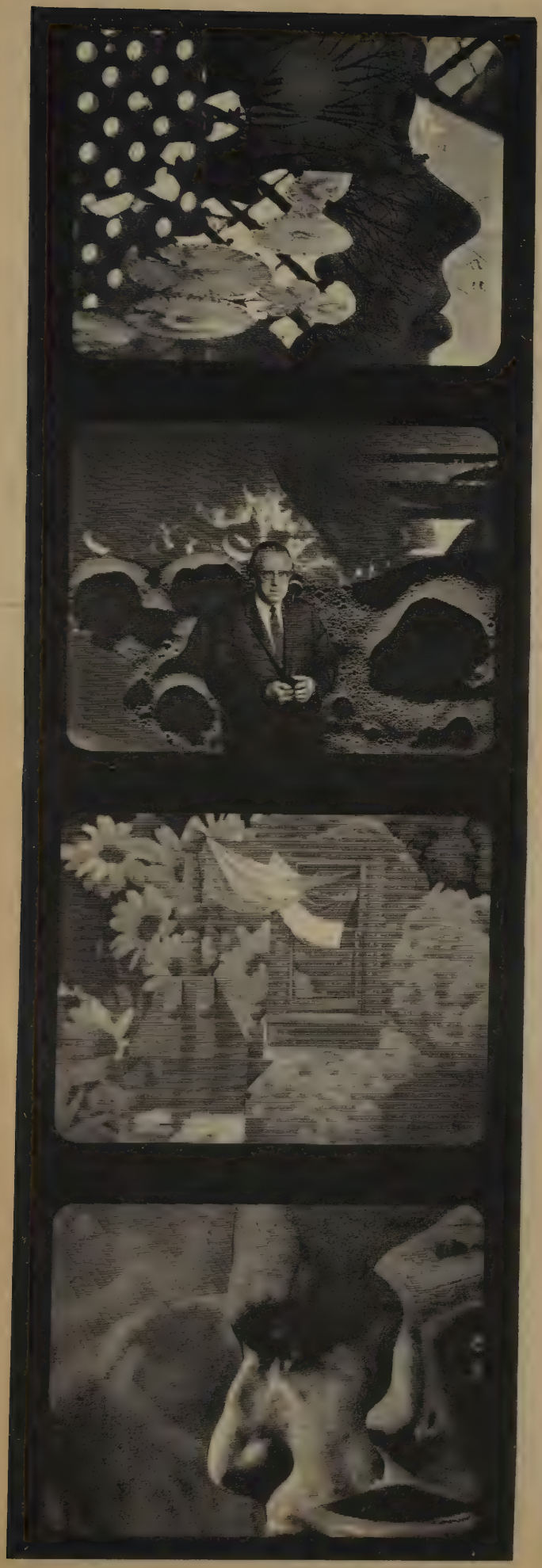
ANNOUNCER:

Undeniably our world has relentlessly driven itself to the crumbling edge of suicide. Our deus-ex-machinas are consuming the last supply of fuels. We are forced to halt and to confront the ancient lesson:

ANNOUNCER:

"Salvation" is in unity, in the age-old concept of brotherhood with the Earth. We are all born of Mother Nature.

Start today to change . . . regard nature as teacher and learn from its model of everything co-existing in delicate accord. This is the pattern and the precedent for the new-old change that will reinvigorate us individually and collectively.



ANNOUNCER:

The new mentality profoundly recognizes our intricate relationship with the Earth, realizes that we humans form only one humble part of the ageless system. But because of our disproportionate, arrogant extent of desire we have dangerously drained the natural resources of the Earth – our spirit. Stop. Slow down. Imbalance terminates in sterility, apathy. Like nature, human beings can only give and take in equal measure.

REGULAR AMERICAN:

Conservation is of course a good thing. But this whole ecology campaign is just another weapon in the arsenal of the young against the mature. You accuse us of screwing up the Earth: What about the three tons of garbage you left at Woodstock? Besides, this nation's technology has achieved plenty for humanity. Anyway, what you suggest – slowing down – means less of production, sales and services. That means less income, and of course you don't have to worry about money to support a family.

ANNOUNCER:

We are all in this together.

The change must begin now. Change carefully and thoughfully in your own life. Accept nature as the pattern for your existence. Freedom is not a denial of order. Consider your relation to the universal way of being . . . everything is in its place, in nature. Everything has its unique function. So does man.

THIRD WORLD:

We won't "accept" any such a thing! You're telling us to recognize a continuing subservient role in society. "Everything is in its place" – bullshit! That's neo-aristocratic and downright dictatorial jive. We want our "place" on top!

ANNOUNCER:

There are multitudes of ways to state the problem. In nature . . . there are no dictators or aristocrats or power games. A "big" animal is not a king. A taller tree has an important but humble use. In nature there are no politics, everything relates. We are all relatives.

ANNOUNCER:

Compassionate order is the guideline of natural behavior. In our time we must see that each of us is essential to the on-going process so vital to the world's balance. There is no room in the natural scheme for vanity, domination or indecision.

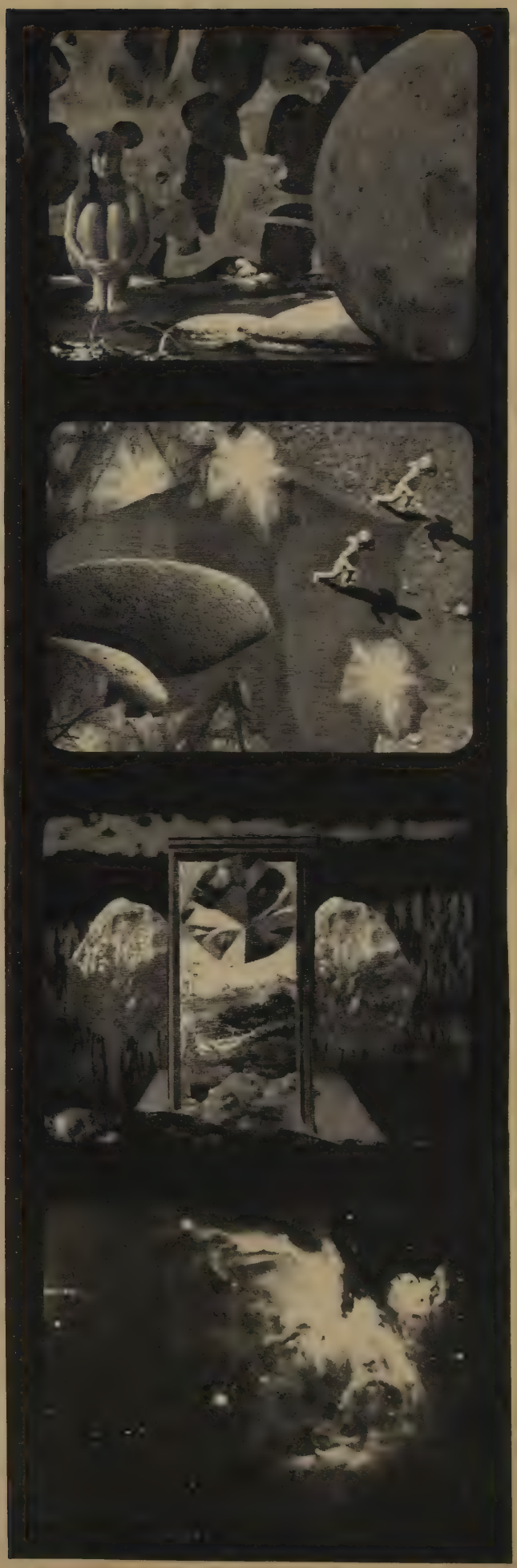
It is up to you.

The Earth crisis is <u>your</u> crisis. And mine.

ANNOUNCER:

Find your pace in space. Change with care, compassionately.
Change . . . and we
all
win.

Good sight.



Life

On Home Deliveries

Recent letters in the Whole Earth writings concerning home childbirth have indicated some problems. I can see that you could easily become deluged with umpteen stories of wonderful home deliveries and umpteen of disaster and near catastrophe. I'd like to pull this together from our experience.

The situation seems to be this: In a small percent of pregnancies serious complications exist; in a small percent of pregnancies serious complications will occur even when a competent experienced doctor or midwife predicts an entirely uncomplicated birth (sometimes a predicted complication does not occur as well). If complications are predicted by an experienced person honestly (and sometimes it is hard to find an honest doctor) it would seem best to go where these complications can best be handled (hospital or maternity home) at a loss of the best emotional situation. In any case it would seem best to have good prenatal care if at all possible. If no complications are predicted a woman can decide, knowing there are hazards, if she wants to take the risk of a home delivery with or without professional help. The fact that Agnes bled to death at home and Annie had a marvelous delivery aren't immediately applicable to you. In the Netherlands half the deliveries are done at home with a good visiting nurse system; their mortality rate is among the best in the world (better than USA).

Areas where interest is high might consider setting up maternity residences near or in a town with a hospital in case of serious problems during labor. Such essentials as good nutrition could also be taught there. A sympatico visiting nurse-midwife would be a blessing for all. The extreme situations such as gross hemorrhage in which total blood loss occurs over a period of minutes aren't handled very well no matter where you are but a hospital is better. Fortunately this is infrequent.

When we delivered our children together without professional aid (oldest is eleven now) we did so knowing of the hazards and possible disaster; death of mother, child or both at the worst. We had a good obstetrician (though a good general practitioner would be fine) who did prenatal care and answered our questions about possible difficulties. Since we lived about 30 miles from the nearest hospital we rented a small house in the town the hospital was in for the due month; we could drive to the rented house when the labor began (however because of a fast labor our third child was born in a VW sedan in freezing weather in the middle of the night! This led to finding out that VW offers money prizes, for the advertising value no doubt, to people who deliver in a VW; we considered setting up a microbus midwife service that would be financed by VW; don't know what their present policy is on this!). Having someone with midwife experience available is quite desirable especially for things like getting the placenta out.

Amateur home delivery should not be taken lightly. If you know the risks and are willing to risk it, it can be, as it was for us, a fantastically beautiful experience fora ll (in a certain percentage of cases it will be a disaster however). By the way, at the time we would have gone to a hospital or maternity home where we could be together or had a doctor do the home delivery; none of this was as available than as it is now. Hospitals are still emotionally sterile places. The best short description of normal birth I've seen is in Johnson & Johnson's first aid book under "Emergency Childbirth", it is not very long but straightforward; it doesn't cover technical details of what an inexperienced woman may expect in labor.

John K. Green (& Iris)
Boulder, Colorado

Hop to it

Did you know that beer is excellent for lactating mothers? It's the B vitamins in the yeast.

Barbara Kirshenblatt-Gimblett
Bloomington, Indiana

Adoption

Here's to disagree with Dr. T. R. Calaman ("Yikes", pg. 44 January). We have just adopted a baby through Children's Friend and Service, a private agency in Providence, Rhode Island. Our "altruism" was welcomed by the agency – we adopted a "hard to place" child. We are unable to prove sterility and our religious affiliations are most tenuous (we were married by a minister). Our home study was short and pleasant.

We now have friends with born-to-them children who have adopted either out of altruism, concern over population, or desire for a child of a specific sex. It does not seem to be difficult to do in Rhode Island, at least through this agency.

Judy & Phil Richardson
Saunderstown, R.I.

Questions and Answers on Voluntary Sterilization For Men and Women

WHAT IS STERILIZATION?

It is surgical conception control – the most reliable means of birth control known today.

For a woman the procedure, called salpingectomy, usually means that a small abdominal incision is made and the tubes are cut and tied off. This prevents the meeting of the sperm and the ovum (the egg) without which no conception can occur. The cutting and tying off of the tubes may also be done by the vaginal approach. The female operation is always performed in a hospital.

For a man the procedure, called vasectomy, involves only the closing of a small tube on each side – the vas deferens – which carries the sperm. A ½ to ¾-inch incision is made in each side of the scrotum so that the tube can be lifted out, cut and tied off, thus blocking the passage of sperm. The testicle continues to form sperm which is then absorbed in the body. Usually, this minor operation is performed in the doctor's office under local anesthesia.

Is sterilization permanent, or may an operation undo its effects, and restore fertility?

The operation is ordinarily performed as a permanent measure and should not be considered unless the parents are sure they want no more children. Continuing research is improving the techniques for surgical restoration of fertility (reversal), but a successful reversal cannot be assured in any individual case.

Is sterilization the same as castration?

No. Castration involves the removal of the reproductive glands (the ovaries in the female, the testicles in the male). Sterilization does *not* involve the removal of any glands or organs. It merely closes the passageways which normally allow the sperm and ovum to meet.

Will sterilization make a man impotent, prevent him from enjoying sex, or cause any change in his health?

No. Vasectomy does not change a man's ability to have an erection or ejaculation. The same amount of semen may be ejaculated as before the operation, but it contains no sperm. There is no change in the production of the male sex hormone.

Will sterilization produce symptoms of the menopause (change of life) in a woman?

No. It does not interfere with menstruation.

Will it make a woman less feminine?

No. Characteristics of femininity are controlled by the hormones of the ovaries. Sterilization does not upset the production of these hormones. It merely prevents the egg from reaching the uterus.

Will sterilization make a woman frigid?

No. A woman's responsiveness depends mainly on the action of hormones, which are not affected by sterilization, and on psychological factors. With the fear of pregnancy removed, frequently sexual response is increased.

How much will a sterilization operation cost?

Charges vary according to such factors as hospital arrangement; type of operation performed; coverage, if any, by an insurance plan. Costs for the female are normally higher than those for the male.

In certain cases of proven need, when no other means are available, AVS may help with the expenses of the sterilization, or refer the patient to a physician who will do it without charge. The federal-state Medicaid program and Blue Cross-Blue Shield now pay for the operation in most states.

Can a woman be sterilized soon after delivery?

Yes – in fact, this is the best time: it is common practice to close the tubes 12 to 48 hours after the baby is born. This does not materially lengthen her convalescence and makes another hospitalization at a later date unnecessary. The operation is also technically easier at this time.

Can a woman be sterilized at the time of other abdominal operations?

This is possible if there is no inflammation or other condition present which makes the closing of the tubes inadvisable.

Can a man be sterilized at the time of other operations?

Yes, with some types of operations. For example, if he needs a hernia repair, a vasectomy may very easily be done at the same time.

How long will a patient be inactive?

Usually not more than a week for a woman, and about one or two days for a man.

WHO SHOULD BE STERILIZED, THE MAN OR THE WOMAN?

That depends on the individual family situation. Sterilization of the male is the simpler operation, but this should not be the only determining factor. The physical, mental and emotional condition of the man and the woman, the stability of the relationship, family histories, and other factors should be considered carefully and discussed with the physician or other counsellor.

Vasectomy, the operation for a man, may be preferred when–

- the simplest, least expensive method is wanted;
- the woman's health would be endangered by any operation, even sterilization;
- policies at available hospitals make no provision for voluntary sterilization. (Vasectomy can be an office procedure and thus independent of hospital policy.)

CAN ANY DOCTOR PERFORM STERILIZATION?

It is advisable to choose a physician experienced in performing the operation.

from:
Association For Voluntary Sterilization, Inc.
14 West 40th Street
New York, New York 10018

◆ The Monastic Way of Death ◆

When a monk dies here, unless it is in the middle of the night, the big bell is rung slowly for a longer period, a signal for the monks near the monastery to drop what they are doing and come pray for the Brother that he might have a good trip into eternity. Generally a large number are on hand to gather around the bed and join in the prayers. (We do the sacramental Anointing of the Sick in church for any monk getting on in years or sickly, but long before he is approaching death).

Some moments after his death, all take their leave and the Brother Infirmarian takes over. He first washes the body with care and then clothes it in a fresh habit. There is no embalming, and the only special items are that the anus is stopped up to prevent any draining, and a cloth band is wrapped around the head and under the chin to keep the mouth closed. We call the local hospital for a doctor to come out and remove the eyes for the Eye Bank, to which all the monks are subscribed, or else drive the body to the hospital if the doctor is tied up. We do not paint the face or anything like that, but simply pull his hood up over his head and fold his hands in his sleeves. If he is also a priest, he wears a stole. Then, when all is ready, the body is brought in solemn procession with the community to the monastery church. Since one of the monks is a doctor, the official declaration of his death and all the legal matters are taken care of by him and the local monk notary: the laws are quite detailed.

The body is laid out on a pallet or stretcher reserved for the purpose and is placed in the nave between the two rows of choir stalls. Then monks in turns keep watch by the body, two at a time, continuously until the burial. They watch in half-hour turns, reading the Psalms aloud to one another. The Psalms are good poetry and good prayer, and they sit well with the heart in the presence of death when you are alone with it in the deep of night. The Easter Candle is kept burning by the body as witness to our faith in the Resurrection: this is a big candle some four feet tall and as thick as your wrist. This with the large processional cross is used at all death rites. The regular Choir Services continue in the presence of the deceased monk, seven times a day, beginning at three in the morning. At such times the two by the body join the choir. The Choir Services are adapted to the event and are concerned with appropriate themes: time, eternity, death, life, resurrection.

The funeral Mass generally takes place the next morning, the Memorial Supper of the Lord. Such a Eucharist is quite filled with hope and with joy, and all eat the bread and drink the cup to faith in the life to come and in prayer for the dead Brother. After the Mass the body is sprinkled with blessed water and a thurible of smoking incense carried around it. Then the procession forms and we carry him out to the graveyard back of the monastery church.

There the Brothers have already dug a grave deep into the earth, sometimes with the help of compressed-air shovels, since there is hard clay and shale not far below. We gather around the grave and there are more prayers and readings, the grave is blessed and incensed by the Abbot. Then the Brother Infirmarian goes down into the grave by a ladder to receive the body. Meanwhile the pall-bearers have lifted the body from the pallet on the quilt mat which has three long cloth bands on each side by means of which they lower the monk into the grave. The Brother down below arranges the body, slips the quilt out so they can pull it up, pulls the monk's hood down over his face, covers him with a white sheet, and then comes up the ladder. The ladder is removed and the Abbot steps up and scatters a first handful of earth over him in the form of a cross. The pall-bearers start to fill in the grave quietly and gently, beginning at the feet. When the whole body is well covered they stop and the community leaves, after first kneeling on the earth to ask pardon for themselves and all men. A few remain to finish. Then a cross is erected over the grave and later on the name put on it.

For some weeks after his death, a cross stands at the monk's place at table in the refectory to remind all of their Brother that they may pray for him. During the days after, the monks will be praying their Psalters for him that all may be well with him in the next life.

Such a monastic funeral is very simple and beautiful. There is nothing gruesome or morbid about it, nor anything phoney or artificial. Death is recognized for what it is: the end of life on earth, and no attempt is made to hide this. The body is treated with reverence and love, but is not embalmed or falsified in any way. Nor do we use a casket or box, since the Brother is being returned to the mother which bore him and who will keep him in her depths until the last day.

Possibly the only one in the cemetery (besides an abbot who died while on a train trip) to be buried in a casket is Father Louis (Thomas Merton). He died in Bangkok and was given a military coffin and flown back to this country by the Armed Forces with other dead. Since there had been a long delay, the Abbot decided not to remove the body from the casket, no embalming having been done. The monks found the large casket in their midst somewhat incongruous, yet noted that it was perhaps fitting that the author of *The Sign of Jonas* should have been buried inside so large a fish. Father Louis was always fond of the genuine character of the monastic funeral, and we wondered that he did not in some way make it known to us that the real Jonas did not stay permanently in the belly of the whale. Other than that he had the regular monk's funeral.

Father Matthew Kelty
monk of Gethsemani
Trappist, Kentucky

New Suggestions

SAFE AND NOT SO SAFE

Commercial insecticidal preparations which are relatively safe for the environment:

Antrol African Violet and House Plant Insecticide Bomb
Black Flag Ant and Roach Killer
d-Con Double Action Ant-Roach Killer and Repellent
d-Con House and Garden Spray
Flea Collars (all brands)
Formaldehyde Fumes
Green Thumb Insecticide Spray
Hartz Mountain Cat Flea and Tick Killer
Hartz Mountain Dog Flea and Tick Killer
Hartz Mountain Rid Tick
Hartz Mountain Rid Tick Shampoo
Johnson's No-Roach
Ortho Isotox
Ortho Malathion 50
Oxalic Acid (any brand)
Raid Flying Insect Spray
Raid House and Garden Spray
Raid Rose and Flower Spray
Real Kill Household Spray
Roaches' Last Meal
Sal Soda (any brand)
Scope Insecticide Granules
Sears Sevin
Sergeant's Flea and Tick Powder
Sergeant's Flea and Tick Spray
Shell No-Pest Strip (should not be used in rooms with infants or invalids)
Spectracid
Terro Roach Killer

Beware of preparations containing the following. They are the compounds most likely to accumulate and cause damage to the environment and people. Know your enemy.

Aldrin	Endrin	Methoxychlor
BHC	Heptachlor	Perthane
Chlordane	Heptachlor epoxide	Strobane
DDD (TDE)	Hexachlorobenzene	Telodrin
DDE	Kelthane	Toxaphene
DDT	Kepone	
Dieldrin	Lindane	

Commercial insecticidal preparations which may accumulate and eventually cause environmental damage.

Antrol
Antrol Ant Trap
Comfy-Pet Flea and Tick Killer
d-Con Ant Pruf
d-Con Roach Pruf
d-Con Stay Way
Hartz Mountain Cat Flea Powder
Hartz Mountain Dog Flea Powder
Hide
Ortho And and Roach Spray
Ortho Chlordane Spray
Ortho DDT-25
Ortho Dormant Spray
Ortho Lawn Spray
Ortho-Klon 44
Ortho Triox
Paket Ant Bait
Raid Ant and Roach Spray
Raid Moth Proof
Raid Yard Guard
Science Kelthane
Sears Ant Killer
Sears Flying Insect Killer
Sears Insect Spray
Terro Ant Killer

Prepared by Indiana University
Biology Dept. for Crisis Biology
Series Lectures

Sent in by
Barbara K-G
Bloomington, Indiana

"Your Future In . . ." in the Future

The "Your Future In . . ." series *[Spring 1970]* will soon be sold by Arco Publishing Company
219 Park Avenue So.
New York, N.Y. 10016
and thru them will be available in paper @ $1.95 each in November.

Stan Gould
Berkeley, CA

The deterrents in detergents

By MARY GULLBERG
Co-op Home Economist

Detergents containing phosphates *are* biodegradable — and the reasons lengthy. Some of the press and many consumers have confused "biodegradable" with "phosphate pollution." These are entirely different things although both affect water quality. In 1965-66, the entire detergent industry switched to a biodegradable "active ingredient" in the detergent formulas. This means that the active detergent compound in all products naturally disintegrates in time and will not indefinitely pollute our waters.

The problem with phosphates is not biodegradability. Phosphates permit the growth of algae and other water plants in lakes and bays thus hastening the "death" of the body of water since these water plants use up the oxygen needed by fish and certain bacteria which keep the water clean.

Phosphate "builders" are added to the heavy-duty laundry detergent formulas to increase the cleansing action of the detergent proper. (Light-duty detergents contain little if any phosphate.) Since one effect of the addition of phosphates is to soften the water, the amount in a given formula may vary depending upon the hardness of softness of the water in the sales area. Brand X could have 10% phosphate in a soft-water area and 50% in a hard-water area.

Other inorganic compounds have been tried as builders for detergents (carbonates, borates, silicates and most recently nitrilotriacetic acid) but none of them are as effective as phosphates. The major detergent makers are giving top priority to finding a substitute that will be effective but will not pollute.

Or it may be possible to improve the treatment of waste water for phosphate removal. Some two billion pounds of phosphates per year are marketed in detergents. In addition, 680 million pounds of phosphates per year enter our streams form sources other than detergents — mainly human wastes and urban and farm runoff.

For these reasons, some experts on water quality are urging that phosphate pollution should not be handled by legislation banning phosphates in detergents at this time. (This is the way the detergent industry was forced to convert to biodegradable detergents in 1965-66. At present, Rep. Reuss of Wisconsin has a bill, H.R. 2435, before the House Committee on Public Works that would ban phosphate-containing detergents from the market.)

It is too bad that the potential role of phosphates in water pollution was not determined before they were introduced into detergent formulas. But it is clear that any substitute for phosphates must not only be as effective as they are in washing clothes but must also not be detrimental to water quality. Hence the fear that legislation might be too harsh a method for dealing with the problem in light of our present lack of knowledge.

Enzyme presoaks (Biz, Axion, etc.) contain high levels of phosphates as all common substitutes for them kill the enzymes. Since enzymes are not especially more effective than detergents for either soaking or washing clothes, you can easily dispense with their use.

Laundry soaps (White King is the only one Co-op sells) contain little or no phosphate. Unfortunately, soap doesn't work very well in automatic washers unless the water is extremely soft, softer than that available in most areas including the East Bay. The hardening salts in the rinse water react with the soap residues in the wash to form a white curd which is visible on colored articles. I wonder, since we send men to the moon, if our engineers couldn't design an automatic washer that would permit the use of that least of all water pollutants, soap?

from: *Co-op News*, April 6, 1970

Behrend's Book

I would like to thank you for the interesting review given to our book *[Behrend's Book]* on page sixty-eight of your catalog *[Spring 1970]*. It has created a problem for us however, as near as we can figure, we have got about 5,000.00 requests as a direct result of your listing, and we are just all out of catalogs. We are working hard on a new one as you know it takes time.

If you get complaints, that people did not get a catalog from us, please understand that you help create the problem.

Incidentally our new catalog will be much better than the last and with much more useful information. We may have to charge for it, for people who are not regular accounts.

Jack Behrend
Chicago, Illinois

Nine-spotted Lady Beetle

Ladybugs

Put away those garden sprays! A safe killer of aphids, fruit scales, bollworms, and leafhoppers are the Hippodamia Convergens. Freely translated, this is the Ladybug Beetle. For $2.50 you can buy 9,333 Ladybugs (1 pint) from the Sierra Bug Company, P.O. Box 114, Lady Bug Lane, Rough & Ready, California 95975. The bugs will arrive live and ready to consume 40-50 aphids per bug per day. Other quantities: 1 qt.— $3.50, 1 gallon (75,000 bugs!!!) — $7.00. Tell them you belong to ZPG.

from:
Zero Population Growth Newsletter
Menlo Park — Atherton — Palo Alto —
Stanford Chapter

Hi-Fi Tips

Read John Holt's hi-fi letter, and concur with his rave review of the Dynaco speaker. After about 13 years as a hi-fi buff, the last 8 of them writing about the field professionally, Dyna is one of those companies whose new products I tend to trust before I see them, but in the speaker, they've surpassed themselves.

Dyna also has discovered that a good step towards the effect of a four-channel system can be achieved with existing stereo recordings and broadcasts, using only one extra speaker. Connect it across the hot leads of both stereo channels, and any instrument that was recorded out of phase in the two normal channels comes out loud and clear from this 3rd speaker (which should be in the back of the room). Other than that, stay clear of four-channel for at least 6 months, until the smoke clears. There will be lots of pseudo-quad gadgetry and some good stuff coming out in a batch between now and Fall.

The Rectilinear X John Holt mentions has been replaced by the Xa, which Rectilinear (friends of mine) say is better, as does the guy who writes their ads, and uses them at home. There seems to be some opinion that the X (and Xa) beat the more expensive Rectilinear III; I haven't directly compared them, so can't confirm, but all 3 Rectilinears sound fine to me, and I prefer the RIII to the AR-3a for most (not all) material — especially prefer RIII for piano, but AR-3a for most pop.

If I were recommending a cheap component system right now, my choice would be:

Dual 1212 changer of AR turntable.
Grado FTR ($10) cartridge — Shure M91E, if you want to spend lots more. (Also, listen to the Pickerings — I don't know how well they sound from personal experience, but the dust-brush feature is nice for people who don't clean records much)
Sony ST-5600 tuner
Sony TA-1100 amp (may be prejudiced — had them in the house while I wrote ads about them for Sony — but they seemed very good for the money: $120 each)
Dynaco A25 speakers.

Watch for Dolby-ized tape and cassette equipment later this year — it lets you get good quality on recordings you make at slower speeds (saving tape); KLH $225 tape recorder has it now, others to follow, especially in cassette. Doesn't do anything for pre-recorded tapes, though.

Roy Allison's hi-fi book from Dover publications (sugg. by Fred) is best practical guide I know; Ed Villchur's companion volume (also Dover p.b.) is best, most lucid, most accurate guide to hi-fi theory.

Ivan Berger
New York, N.Y.

P.S.: Other companies I take on faith: AR, Shure, KLH (at least, until many of their top brains went out and started Advent — now I wait and see on both companies).

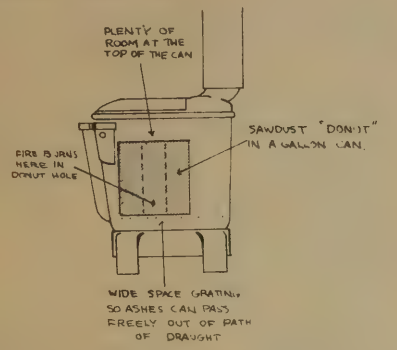
P.P.S.: AR speakers sound very bass-y when sitting on the floor. If you don't like that, they make a good, cheap speaker stand — or raise your speaker on a crate (good for other speakers, too, with the same problem).

SAWDUST HEATER

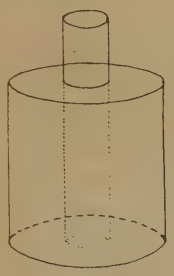
Here's an idea for using sawdust as heating fuel in a home stove. Presently vast quantities of sawdust are burned off as waste by lumbering and sawmill operations. Smoke from inefficient combustion of sawdust creates L.A.-like conditions in places like the Willamette valley in Oregon.

The stove can be any one of a number of different varieties of stove presently available, but one that loads fuel from the top is best.

The arrangement looks like this



Fuel "loads" for the stove can be made very easily in a gallon (or larger) can with both ends cut out. Fill the can on a level surface with a 3" pipe or stick down the center of the can, and press the sawdust into the can tightly enough so that the center pipe can be removed and the can and sawdust can be lifted without all the sawdust falling out. Can and sawdust go right into the stove and can be lit with a little kindling or starter in the center. The cans are reusable, of course.



I've seen the idea at work in Afghanistan. One can of sawdust burns for an hour or two and puts out a hell of a lot of heat.

Lindsay Haisley
Santa Cruz, CA

Potters' Wheels, continued . . .

Despite the hysteria and name-calling, Mary Ann Gehan is right about including the *Klopfenstein* wheel. I did not mention it at first because in my judgement the *Soldner* Flywheel type is in general use all over the country while the use of the *Klopfenstein* treadle type is only taught in a few schools in Michigan and Ohio where Mary Ann and I happened to start working.

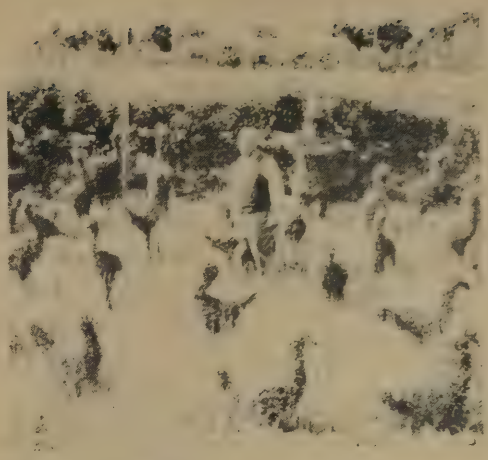
It's a beautiful tool. I've had one for five years but now use it mainly as a kind of spinning easel for decorating and brush glazing. The reason is the *Brent* model C which I've used for 8 months and which I feel is a significant breakthrough in power wheel design and price. It is quiet, compact, provides full power at low speeds, very smooth speed change and, with a more powerful motor option, is capable of doing this with any amount of clay.

Jeff Schlanger
New Rochelle, N.Y.

A Canadian Loom

I was dismayed to read in your March supplement about the unhappy experience of Karl Smiley in his search for a loom; and I thought some information about a loom designed and made in Vancouver might be of help to him and some of your other readers. The maker of the loom is H.C. Harris, of North Vancouver, B.C., Canada, and the looms can be ordered from Handcraft House, 110 West Esplanade, North Vancouver. The table model, 22 inch, 4 harness, sells for $55.00; and a treadle version of the same loom costs $85.00. Anyone living out of Vancouver would have to add shipping costs which I have been advised would not exceed $10.00, and persons living in the U.S.A. would have to find out about customs, but even with these added costs the loom is a bargain, sturdy, attractive and well designed.

Jean Mallinson
West Vancouver, B.C.



"Meat" from Wheat

Have you ever published a recipe for home-made wheat gluten? This is a basic meat substitute and very easy to make, forming the basis of many of the commercially produced, canned substitutes, notably Worthington and Loma Linda vegeburger, vegetable skallops, dinner cuts, vege-cuts, etc.

Mix 2½ to 3 cups of water with 8 cups of flour (gluten flour is easiest, but ordinary white flour will do), enough to make a firm ball. Soak under water overnight. The next day, keep kneading the dough under water and pouring off the starchy liquid, replacing with fresh cold (tap) water until water is clear during kneading (no more starch – this is where gluten flour was nice). You now have Wheat Gluten (the protein of flour) in the form of a large, rubbery ball.

For eating, slice into thin steak size, roll in batter, and grill or fry; chop into fine pieces and use in stews; or put through meat grinder and you have vege-burger, which can be used in many of the same ways as hamburger (ground beef).

As the gluten is tasteless, much like a hunk of sponge, disguises are necessary. Yeast extract, soya sauce, vegetable salts, wines, and, in general, anything you can think of, improve flavor considerably. (Perhaps you can find someone to tell you about preparing tofu as well.)

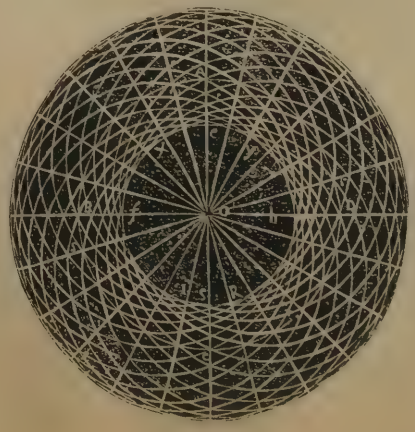
Some of the commercial meat substitutes are quite nice. Of the American firms, Worthington is most tasteful and innovative, making such concoctions as Wham, Chickenette, and Turkette (these are sold frozen in long sausage-like rolls or blocks). One may object to the idea of imitating meat, even to the extent of naming one's non-meat products after it, but squash your objections and enjoy the pleasant texture and taste, remembering that for the money you're getting very high protein (as high as in meat), no animal fats or products, no bones – just good, healthy things.

Some of these products may be hard to find, even in health food stores, so try to locate the local sales person if you can. You might also try finding a nearby Seventh-day Adventist church, as they seem to know where to buy meat substitutes as cheaply as they can be obtained anywhere.

One of the contributors to your March Catalog mentioned a good vegetarian cookery book by the Seventh-day Adventists. I obtained one called *An Apple a Day*, put out by the Women's Auxiliary of the Loma Linda University Medical School [in Loma Linda, CA 92354]. Selling for $4, it contains nearly 300 pages of mostly easy-to-follow vegetarian recipes, many utilizing the commercial meat substitutes. Others use grains and nuts. There are recipes for all types of food and a section of tasty foreign recipes is included.

It's an absolute godsend for those who have decided to go vegetarian but don't know how to cook without using meat and aren't sure of obtaining the necessary nutrients and food values when they leave out meat. Of course, when one perfects the gluten technique, one can substitute that for the canned goods.

Ann Liston
Burnaby, B.C.
Canada



Bean Sprouts (Again?), Bicycles and More

Hear that over-watering the beans leads to problems, and quality of water is important.

In prison camp (Nipponese-type) some unsung genius built a Whole Earth-type bean sprouter that worked like the whole earth. Simple, too. If you've been having trouble with water control, try this.

The device consists of three parts: a tank for the water; a rack for the frames, and the frames. Decide how big your frames are to be and proceed accordingly.

Frames. Make these of light wood, perhaps 1 foot wide by 2 feet long. Tack gunny sacking, or similar coarse cloth to one edge (1 foot dimension), bring it back around the other edge, tack again, and flop it down over the front. Now tack or staple the bottom section of cloth to both edges, stretching it fairly tight. This makes the surface on which the beans are placed. Dimensions of the overhang depend on position of frame in rack.

Rack. The rack is three-sided, and large enough to accept the frames. The frames slide into the rack, and should be spaced about 1 inch apart, vertically.

Tank. This is the basis for the rig, and either must be big enough to accept the rack, or you pick the tank, and build the others to fit. The tank can be a large plastic dishpan, or anything similar.

Overhang. The cloth that hangs over the front of each frame should be long enough to reach well into the plastic dishpan; for convenience, cut each long enough to reach the bottom of the tank with a couple of inches left over.

Use. Set the rack in the pan, and pour in enough spring water (or local equivalent, something without too much chemical content) to fill the tank about one-third to one-half full. Wet the cloth of the first frame and put the beans on the lower portion, bringing the upper portion over the beans. Slide this into the rack so the overhang of the cloth dips in the water. The rest of the frames are handled the same way. Keep the whole rig in a warm dark closet, checking sprout growth after a few days. If you don't have a spare dark closet, the frame must be covered to prevent breezes.

Notes. Works with any kind of beans, and food content is increased by sprouting. If the sprouts get too old, they are tough, and need more cooking. Capillary action provides the correct amount of moisture for sprouting. Water quality will influence flavor.

Diane Di Prime (March) offered some survival hints. A tool to consider for cooking on the hibachi is a wok, probably the most sophisticated cooking tool ever made. (Generally, Chinese tool design, like Japanese, represents sophisticated usage of low-technology materials.) Don't buy stainless steel, tourist-type wok. Do buy wok to fit your hibachi, your round hibachi.

You can cook anything in a wok on a minimum of fuel. And when you take the wok off the fire, the food stops cooking, as it should. Chinese-style cooking helps beat the organization, and generally has higher food value, if you must have cooked food.

Re: Hibachi. It would be interesting to know the relative efficiency or cost-effectiveness, of the hibachi. Charcoal is great for the survival of the city dweller, providing good circulation is maintained in the room, but it is an urban-available fuel in this country. And the quality is extremely variable.

Bicycles. Add to your bicycle note: Raleigh, world's largest manufacturer of such devices, produces a fine quality, for dollars, machine at $85, the *Grand Prix*. Reasonably light, quality superior to most in that range, and frames from 19-1/2 up to 24-1/2 in.

Do you need more information on choice of bike, etc.? I can supply; it is not too easy to come by and few retailers are that much interested (exception, Velo-Sport, Berkeley).

The *Grand Prix* doesn't come with sew-on "tubular" tires. They are a damned nuisance (even though much more efficient in terms of rolling friction) when you have a flat. It takes skill and experience to repair a flat.

Could we get Ronald Clean to ban cars for one Sunday each month? Best anti-smog, anti-mortician device (bicycle) would then come into its own.

Dog Shit. What do your readers do about dog shit? After years of spading up the yard and burying the damned stuff, I finally built a "digester". This handles the shit output of a small, 4-legged, fur-bearing insect my wife calls a canine, and the output of a 70-pound, dwarf-style German shepherd at a cost of about $0.01/day for chemical. Fly-free, practically odorless, and simple. And returns nutrients to the soil, where they belong.

Jerry Lundquist
Fremont, CA

Merck Manual

Thanks for returning my check and the note about the *Merck Manual* publishers. The funny thing is that I've discovered the book is being sold right here on the University of Oregon campus, at the University Co-op Bookstore. Figure that one out . . . .

Anyway, the Co-op does accept mail orders, so it might be a piece of information worth passing on to your readers. The address is:

University Co-op Store
895 East 13th Avenue
Eugene, Oregon 97403

Bob Morris
University of Oregon
Eugene, Oregon

Living Stuff

Seaweed Green Toothpaste?

Last time I wrote I mentioned Army maps of the world at 1:250,000. Well the Army says they aren't available for public use. However, they are in the library at the University of Pittsburgh and so I imagine they are available in other libraries. And if you want them bad enough you can always Xerox them.

Some info on items mentioned previously by others:

1) P. 12 Jan. '70 Supplelog: CATHAY FOOD PRODUCTS, INC.
New address:
31 N. Moore Street
New York, New York 10004

2) P. 10 Jan. '70 Catament: SPILLER AXE & TOOL CO., INC.
New address:
Oakland, Maine 04963

New Items:

1) International Yellow Pages: Access to tools from other lands; clearly limited to subscribers (i.e., those companies who pay to be listed) but useful nonetheless. Must list nearly 2000 different product areas.

2) *Ceramic Reference Manual* by Glenn C. Nelson (Burgess Publ. Co., Minneapolis, Minnesota). The edition I've seen is 1957 so is a bit dated but provides list of required (?) materials and where to get 'em as well as many important (but I don't know how accurate) "recipes" and explanations (on clays and glazes).

3) *Chemicals Used in Food Processing*, Publication 1274, National Academy of Sciences – National Research Council, 1965, $6.50. Food Protection Committee, Food and Nutrition Board (also, see Publ. 398 *The Use of Chemical Additives in Food Processing* and Publ. 887 *The Use of Chemicals in Food Production, Processing, Storage, and Distribution*). While these books are horror stories of a modern sort, they can be useful tools in the following ways:
   1) They can scare the shit out of a lot of people and get them to eat good food.
   2) Can provide info to crusaders on what foods to search for what foul chemicals (to be relayed by appropriate pressure to the powers that be).
   3) Provides listing of natural occurances of chemicals, so natural folks can find source which is less disturbing.
   4) Provides list of other relevant materials.
   5) Explains functions of chemicals, something labels never do (except for word like "preservative").

4) Natural Brand Tooth Paste available at General Nutrition Centers and by mail from Natural Sales Co., Box 25, Pittsburgh, Pa. 15230, U.S.A. 7.25 oz. (BIG) tube, 98¢. Composition: bone meal, papain (extract of papayas), pure natural seaweed extract (maybe for color 'cause paste is seaweed green), and natural oil of peppermint. Good stuff, need less than normal toothpaste. Good find since my favorite toothpasts (McCleans and Ultrabrite) contain huge amounts of chloroform (and who wants lipstick on their cheeks all the time?)

5) *How to Fix Almost Everything*, Stanley Schuler, Pocket Books, S.75. Not really terrific, but useful. Reason not terrific is that for complicated jobe, he always says take it to a repair shop. Still provides many useful hints on wide variety of subjects, and of particular use to noviate fix-it man.

   Examples:
   How to fix damaged arrow feathers
   How to fix fountain pen
   How to fix a faucet (Drip, Drip, Drip, Drip . . .)
   How to fix a stone wall.

Jim Alt
Pittsburgh, Pennsylvania

Outlaw Area Note

Some thoughts about the Outlaw Area . . . It is a mistake to assume that the outlaw area is only in those places where other people aren't . . . as far as I know ANYTHING GOES ANYWHERE . . . in some places some things are given and in others, others . . . if you want to live in a natural wilderness area then you are opting for natural variables to deal with e.g. wind, cold, etc. . . . if you live in the midst of what Edward Hall calls the behavioral sink e.g. S.F. bay area, New York, etc. then you have got other people to deal with . . . The Outlaw Area is a state of mind and exists in the middle of civilization or in the wilderness . . . this seems important because we certainly need outlaws to learn how to make it in the center of The Man's camp . . . "Anything goes" there too except that the "laws of society" take the place of, or exist in addition to, the "laws of nature" (there really is no difference between them) . . . it is necessary to realize this in order to get the Outlaw Area out of the fantasy state . . . everyone lives in the outlaw area right now . . . most of us have made deals in one way or another so we don't TRY to get away with things . . . there is nothing to get away with . . . the Outlaw Area is real and we live in it all the time . . . "Laws" are just made by other people and they can be fooled long enough if you've got something to do which is the whole thing . . . panic makes us drop everything but "survival" . . . it is not necessary to flee to some Outlaw Area or other just to convince us that it's there . . . we are already there whether we go somewhere else or not . . . the Outlaw Area is not a fantasy . . . let's not live it as a fantasy . . .

Also, regarding "Bum Trip Conversion" the best advice I know of is from Hexagram 43 of the *I Ching* (Breakthrough). " . . . we should not combat our own faults directly. The best way to fight evil is to make energetic progress in the good. . . ."

Tony Bernhard
Winters, CA

taken from LIFE (1890)

Acid Psalm

In your January Supplement you requested that readers send in their favorite remedies for bummers. My favorite is reciting the 23rd Psalm (either silently or aloud).

Also recommended: *Metaphysical Meditations* by Paramahansa Yogananda (one of the best 60¢ buys in the cosmic universe).

Norman Caplan

HUGE SMILES

Dear Whole Earth,

I would like to review/suggest one service which has been lacking in your/our catalogue.

In general, the inexpensive dental work offered by schools of dentistry and more specifically, the good work offered by the University of the Pacific's School of Dentistry located at 2155 Webster Street in San Francisco.

The U. of P.'s student clinic does work at around 1/3 the price of a dentist on the outside. The work is done by students supervised by a doctor. You are charged for the materials used . . . an amalgam, a regular 'silver' filling costs about $7.00. The greatest savings are in gold, having gold inlays, onlays, foils, and caps. Costs run a quarter of what you would pay outside.

The procedure is that you come in to have an oral examination at which time they will decide if they will take you – then you are given to a student. You and he fill out a form or two and decide on a workable schedule, then you are given an appointment for full mouth X-rays (these are required and cost $15). After that, about two weeks, your work is begun.

I have been catching up with my dental needs for almost a year with several vacations interspersed (like being in the Sierra all summer with two return trips since . . .) – they are very accommodating. They take more time than a real dentist, however their price makes up for the time.

This sounds like a rave letter, I guess, it probably is . . . I have never been able to go to a dentist until my teeth started to be more painful than my memories of a childhood run-in with a brutal, insensitive old dentist. The University of the Pacific's student who does my work, 'Stevie Wonder', has overcome the deep-rooted fear that I had . . . mostly by explaining each step as he worked.

I know a lot of hips, yips, freaks, and straights who haven't the money to pay a dentist, but who do have the time and can scrape together enough bread for the minimal cost of a dental school.

There is one service that they do not offer – mail order . . .

Perhaps you could list such services in other cities where the nomad can have himself put back in order.

Medical schools offer the same type of service . . . they should be reviewed.

Huge smiles . . . . . .

From
Jan Tiura
Moss Beach, CA

The Tao, and Healing

Tracy McCallum (is that you, Tracy?) is right. The translation of the *Tao Te Ching* you recommend is unsatisfactory. Of course, so is the one he recommends. Trouble with the *Tao Te Ching* is that there are no satisfactory translations. None whatsoever. Thing to do is get hold of as many different translations as you can find (there's at least a dozen in paperback) and eventually compile your own composite translation therefrom. It's no good, the *Tao Te Ching*, until you've made your own translation.

About acid bummers &c.:

Assume that human beings are energy devices. Assume that your right hand is a positive pole, your left a negative (vice versa if you're left-handed). Assume that headaches, bummers & the like are symptoms of minor disturbances in energy flow. (These assumptions are not necessarily true. Just a useful metaphor, a convenient way to think, that works.)

To cure a headache, place your positive hand at the base of the sufferer's skull and your negative hand on his forehead. Imagine there is a current flowing through his head from your positive hand to your negative hand, and that this current causes the flow in the sufferer's head to straighten out & flow right, thus terminating his headache. This takes from 5 to 30 seconds.

This works, whether the operator believes it will or not, and regardless of what the sufferer believes. (Beautiful cries of "My God! It's GONE!" are commonplace.) The only requirement is the act of imagination. If you imagine it'll work, it works.

I've used the same process on about 50 acid bummers so far, with 100% success. Variations can be invented freely to suit various circumstances.

This is traditionally called "Magnetic Healing." I prefer to call it & related phenomena "Energy Transactions." Very useful in Magick & other western yogas.

Invent your own techniques. Please tell me what happens.

Relief is probably symptomatic, but saves on aspirin & similar crap.

Chester Anderson
Los Angeles, CA

Aloe Vera for the Skin

Try Aloe Vera on diaper rash (or any skin problem up to and including 3rd degree burns. It cuts healing time by 1/2. We've used it on deep cuts also – no stitches, no scars. Fantastic on burns. Apply liberally, smothering wound in thick salve found within each leaf.

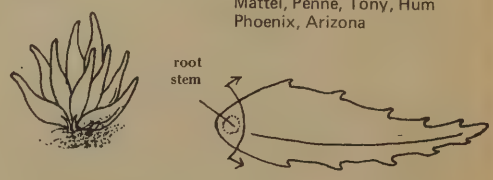
Looks like small Spanish dagger or small green juicy agave. Thick juicy leaves, with sawtooth edges.

To remove leaf, pull down and away.

Try *Bantam* (steel head–faithful lock) diaper pins.

Also, stop cooking your food.

Mattei, Penne, Tony, Hum
Phoenix, Arizona



Down on Singer

Re: a suggestion in Michael Wells' letter, p. 16, March issue, that Singer deserves a pat on the back.

Singer deserves it not, neither for the machine it now makes nor for for its service & sales outlets – at least the Stockton & Polk Street stores in S.F. I don't know what the commercial-use machines are like, and until a few years ago I would have agreed that the machine for home use was fine. It truly was, and until I came to California I thought the service and also ther esale value of machines just superfine – so maybe there are still nice stores. The two I mentioned in S.F. are characteristically rude and unreliable, and if you get caught in an emergency there is no special attention available – unless they hope to sell you a Touch 'n Sew. Other repair men in town will work overtime to fix those damned Touch 'n Sews (I own one) if you tell them you need it – truly. Independent repair men will also tell you that there are better machines available than the Touch 'n Sew, which is now widely available second-hand very cheap due to its several defects, one of which is that the tension device tends to become screwy. So – no resale value. A two year old machine which is in good – even unused – condition and cost nearly $400 new is now worth at most $150 – and used Singers a few years ago were worth a great deal more of their original price than that.

A Singer man once told me that Singer's best machines were made better before WW II, along with Singer's reputation, which is now declining in the face of some strong competition from the new Elna and Viking machines.

I know how to use the Touch 'n Sew, having made a living on one for two years, and I take care of mine. I don't recommend it, nor would I be pleased to see a plug in your good catalog for it. It's not awful, really. It's just not the best available for the money.

Dandelion
San Francisco, CA

VITA

VITA's International Division offers technical assistance specifically to those in developing countries overseas. We solve problems by mail for foreign nationals sometimes directly with the nationals, sometimes through *Peace Corps, AID, CARE, United Nations* and other groups. Our services are free.

VITA's USA Division offers technical assistance to poverty programs within the United States. In addition to by-mail assistance, *VITA-USA* offers a great deal of on-site consultation. There is no charge to a requester for such assistance. *VITA-USA* determines the eligibility of a requester by considering whether or not the project is a self-help project and the inability of a requester to purchase the assistance needed.

We distribute *VITA* publications to people in the United States on an at-cost-plus-postage basis. We constantly receive nickels and dimes for publications that cost more than the ad states and we would appreciate those who are interested to write us for a publications list. The *Solar Cooker Construction Manual* is out of print and no longer available.

Also, in future listings please change the price for the *Village Technology Handbook* to read "$7.00 postpaid".

Terry Ladd
Publications Specialist

The following publications are available from:

VITA
College Campus
Schenectady, New York 12308
U.S.A.

VITA Views, *4 pages. Reports on VITA activities, describes "finished problems", lists selected unanswered technical requests and personnel openings. Available free on request.*

Village Technology Handbook, *400 pages. 1970. $7.00 (includes first-class postage).*

Rural Technology Manuals

Smoking Fish in a Cardboard Smokehouse — *9 pages. 1966. 15¢*

How to Salt Fish — *9 pages. 1966. 15¢*

How to Salt Fish— *10 pages. 1967. SPANISH. 15¢*

Making Building Blocks with the CINVA-Ram Block Press: A Supervisor's Manual — *21 pages. 1966. 45¢*

Making Building Blocks with the CINVA-Ram Block Press: A Supervisor's Manual — *22 pages. 1968. SPANISH. 45¢*

Low-cost Development of Small Waterpower Sites — *43 pages. 1967. 75¢.*

Fresh Produce Handling and Distribution — *11 pages. 1968. 15¢.*

Small-Scale Manufacture of Burned Building Brick — *12 pages. 1970. PORTUGUESE. 75¢*

Chalk Stick Making — *27 pages. 45¢*

Playground Manual — *33 pages. 1969. 75¢*

Write to VITA for a list of their Reports.

FOUNTAIN OF LIGHT HAS FOLDED . . .

We have just received a copy of the latest issue of Whole Earth Catalog.

It is hard to describe exactly what we feel about being listed in such a good publication, where a certain Spirit goes even further than the material published. That is in fact what we have been trying to do with the Fountain of Light: a Publication able to open people's mind to good work executed with care and Love, whatever it is, Baba Ram Dass and Gardening and Research, towards ways to establish a better communication on all levels.

"And the world does not die!" says your back cover. We all hope that within his life time, Man will have enough sense to look at himself, help others look at themselves, help each other to look at their being part of the same universe. Let us help each other stay alive and become aware, within a Universe we will all try to know through SAYING SO.

WRITING SO
As we hope we will also come back to the work we started in the Fountain of Light.

Peacefully, with Strength

Roger Thomas/ for the Editor
Jim Levy
& all of us (TAOS)

CANADIAN ALMANAC

The purpose of the Canadian Whole Earth Almanac is to provide Canadians with the information, sources of information, and materials necessary for survival and well-being; and to foster the availability and usage of the highest quality goods at the lowest possible cost, to the end of improving and enhancing our existence on all levels.

Information on and sources for:

FOOD — growing, gathering, preparing and storing

SHELTER — building and furnishing

ENVIRONMENT — astral, gaseous, terrestial, aqueous, vegetable, animal & human

COMMUNITY & ARTS

INDUSTRIAL ARTS

SPIRITUAL PATHS

and information of GENERAL PUBLIC CONCERN

1 year subscription $9.00; single copy $3.00.

The Canadian Whole Earth Almanac
341 Bloor Street West, Room 208
Toronto, Ontario

'SURVIVAL' SURVIVAL

(Ed. note)

Looks like a good start. Charter issue has a broad range of head stuff and an artful selection of eye stuff.

This is the first issue of **survival**, so you can see if it's worthwhile. The real beginning comes with what you do and the next issue. We don't have the backing, so **survival** will have to pay for itself. There will be no paid advertising or commercial distribution to newsstands. You'll be able to get future issues only by subscribing — fill out the blank on page 96, write a small check, and mail it. We did the first issue. Now it's up to you.

survival is published quarterly (in April, July, October, and January) by Channing and Laurel Grigsby at 2247 Prince Street, Berkeley, California, 94705, with a little help from our friends: those who wrote for this issue or allowed us to reprint; and Shari Horowitz, Nell Butrick, Lee Steinback, Julie Holdaway, and Claudia Niles. Cover photograph by Roger Mulky. Rates: $1 copy; $3.50 per year; $6 for two years (add 50¢ for Canada and $2 for mailing elsewhere. Any material submitted for publication cannot be returned unless accompanied by a self-addressed, stamped envelope.

BIG ROCK CANDY MOUNTAIN

Everything we learn is only real to the degree that it contributes to what we are. Direct knowledge of ourselves, the reality of the world we live in, and the facilitation of our inner growth and change are the ultimate goals of education. For the most part, self-knowledge has been limited to mysticism, psychoanalysis, and various beyond-the-fringe activities, and education has been limited to a culturally determined range of ideas and techniques. We have been estranged from the knowledge of ourselves; it is no wonder that we are left empty by the present educational process in and out of school.

The BIG ROCK CANDY MOUNTAIN seeks to aid in the acquisition of this knowledge: not by molding the learner into a pre-established pattern, but by providing resources to help him quench his thirst; not by teaching meaningless stockpiling leading to a dissatisfied life, but by encouraging growth in the present leading toward a joyous old age; not by changing people, but by awakening a desire to change. This is our motivation in doing this catalogue.

Whole Earth Catalog of the Air?

Radio Geronimo (205.M.W.)
1, Harley Street,
London, W. 1.

Stewart Brand
Editor
Whole Earth Catalog

Dear Mr Brand

Having read with amazed glee of the work your catalog has accomplished in Rolling Stone some while back, it occurs to me that we might be able to get something going as we have now decided to start our own radio mail order catalog.

As to why, you must understand the position of radio in England. Since the pirate radio ships were sunk by government legislature some three years ago the only radio here was provided by the British Broadcasting Corporation, which as the name suggests is totally government-controlled and run, and Radio Luxembourg, a station based on the mainland of Europe. Anything else is apparently quite illegal. Accordingly we made overtures to other European stations and were pleased to be offered transmission time by Radio Monte Carlo, which despite the distance of some 2,000 miles still has a surprisingly powerful signal here. So we set ourselves up as a competitor to Luxembourg, run on exactly the same lines — only with a totally free policy, which is something they sadly lack

So we got on the air and then looked around for some way to finance the whole trip. Naturally we thought of advertising first of all, but they just didn't want to know — it was a case of okay, when you're established we might think about it — so we moved on from there (who needs ads for baked beans and brillo anyway?) and having already established an audience numbering several thousands and with a potential audience of some hundreds of millions more — due to the fact that we cover the whole of Europe — we realised the potential of mail order: if enough people dig Geronimo, which happily they appear to do, and they're going to buy things anyway then they may as well buy them from us so that the profit is USED to keep Geronimo on the air.

And it appears to be working. We started off with records, since they were being exposed on the radio anyway, and the response was encouraging enough for us to start thinking about a general catalog, which is now well under way. So I thought it might be a nice idea if we somehow used the ideas which have gone into your own very successful catalogand incorporate some of them in our own, never having seen a Whole Earth Catalog. Anyway, let us know what you think.

Happinesses,

Hugh Nolan

Hugh Nolan

20 June 70

I'll be damned. All along I've thought that Cataloging wouldn't make it on the air (radio or TV) because of time bind: Catalog involves scanning, and you can't easily scan in time like you can in space over a page. But giving purchase-access to what you carry anyway — music — is brilliant. And you might be able to extend it to books by dramatic reading of selected quotes from books you want to carry (incidentally, we've had no copyright hassles yet from publishers, since we improve their sales). Other tools might be a little more awkward on the air. All it comes down to is Selective Free Advertising, designed by you.

Stewart Brand

Big Rock Candy Mountain

$8/ year (6 issues)
$4 single copies

from:
Big Rock Candy Mountain
Portola Institute
1115 Merrill Street
Menlo Park, CA 94025

Fun and Games

"GO"

Old Chinese sources say Go was invented sometime before 2000 BC by the Emperor Shun in order to strengthen the mental faculties of his son Shokin. I started playing about two years ago and while I can't say my mind is noticeably improved, it certainly has been exercised. In any case, the Chinese and Japanese have been playing it for nearly 5000 years, and it's been our loss that it's been so slow catching on in the West. Start off with Kishikawa's or Smith's books — then try to find a cheap (inexpensive) set. Warning: it takes two to play, so if you don't want to die of frustration, be sure you can find a partner.

Books: *Steppingstones to Go: A Game of Strategy*, by Shigemi Kishikawa. Pub. by Charles E. Tuttle Company, Inc., Rutland, Vt. $1.50 (paper)

The Game of Go: The National Game of Japan, by Arthur Smith. Pub. by Tuttle. $1.95 (paper)

These two are the best introductory books available. However, there are two more that should be listed although both are a bit more complicated:

Go and Go-Moku: The Oriental Board Games, by Edward Lasker (the chess master). Pub. by Dover Publications, Inc., 180 Varick St., New York, N.Y. 10014. $1.95 (paper)

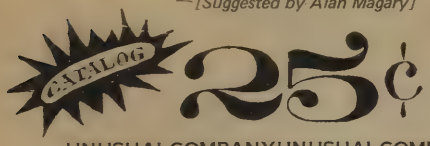
The Theory and Practice of Go, by O. Korschelt. Pub. by Tuttle. $3.50 (hardback)

Equipment (Go board, Go stones): Some U.S. game stores may have Go sets — but they're probably hidden under the counter. Ask for them. If you seek but do not find, check shops that handle Japanese imports. If you start to panic, try:

Macy's, Broadway at 34th, New York City
Takashimaya, 509 Fifth Avenue, NYC
Miya, Inc., 373 Park Avenue South, NYC
Katagiri & Co., 224 East 59th St., NYC
Charles E. Tuttle Co., Inc., Rutland, Vermont
Go is big around Berkeley. Hit some of the shops along Telegraph.

Literature from: American Go Association, GPO Box 41, New York, N.Y. 10012.

—*[Suggested by Alan Magary]*



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DINOSAUR GIZZARD STONES
SCORPION PAPER WEIGHTS
SHARK TEETH JEWELRY
MAN-EATING CLAM SHELLS
ELEPHANT HAIR BRACELETS
SPERM WHALE TEETH
AND MANY MANY OTHER ITEMS
THAT NO ONE SHOULD BE WITHOUT

THE UNUSUAL CO.
POST OFFICE BOX 23628
FT. LAUDERDALE
FLORIDA 33307

FROM KEN COWING, CONN.

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FINGER TWIDDLING

Thumb twiddling need not be the boring activity it has been perpetrated to be. While you are waiting for all the other goods to arrive that you ordered from this Catalog, send in one more for this amazing book. While you are trying to quit smoking, or while waiting for the electrician or someone like him, busy your hands with cat's cradle and other messes which the author has beautifully untangled for all. You, too, can make your own spider web, or even better, a wall decoration or a simple hammock or a cradle for your cat. I bet even Kurt Vonnegutt, Jr. would dig it.

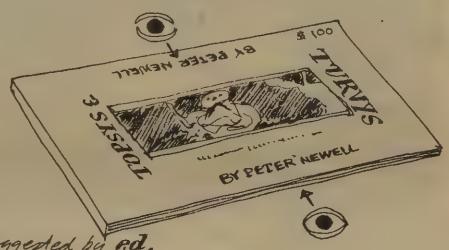
String Figures and How to Make Them,
by Caroline Furness Jayne
$2.25 from Dover Publications
180 Varick Street
New York, N.Y. 10014

Dave Parkes
Ann Arbor, Michigan

TOPSYS & TURVYS

A fun little book for kids by Peter Newell with 74 drawings which are topsy-turvy.

Available from:
Dover Publications, Inc.
180 Varick Street
New York 14, N.Y.
Paperbound $1.00



Suggested by **ed.**

LIGHT SHOWS

Light Show Manual, by Bob Beck. $3.00
Pericles Press, 1540 Cassil Place, Los Angeles, CA 90028

Includes excellent bibliography, list of sources for equipment, list of patents, brief description or each projection technique, and three articles:

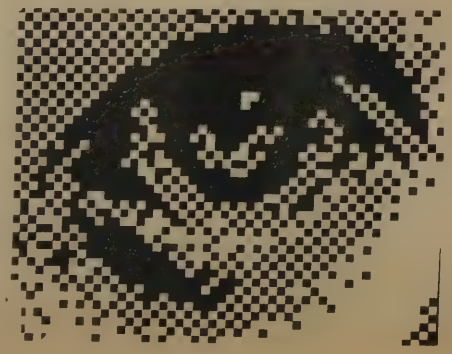
"The Live Performance", by Jean Mayo
"Color Game Traps", by Dr. Henry Hill
"This Shout of Wonder", by Robert Moore Williams

Hill explores the psychological dynamics of two types of people with deeply unconscious compulsions to sabotage anyone who plays the color game. Williams discusses peak experiences and other positive effects of light shows.

Unique Lighting Handbook $3.00
Issued by Edmund Scientific Co., Barrington, N.J. 08007 (Their Cat. No. 9100).

A large (106 pp.), attractive, copiously illustrated manual. Covers black light, strobes, overhead projectors and wet shows, 35 mm projector techniques, slides (polarizing, crystal, organic, etc.), color wheels, front and rear projection screens, color organs, mirrors, light boxes, music-vision, kaleidoscope techniques, lumia, films, light sources, and price and ordering information for all items described. Not so subtly, but understandably, commercial.

G. M. Smith
New York



THE MYSTERIOUS FLEXAGONS

The joy that exists in working with flexagons is not just in the folding of the figures or even in the creation of new and exciting patterns, but in the flexing as well. A star appears, falls away, and is found again fragmented around the rim of the flexagon. Diamonds turn into Maltese crosses. Hidden messages are revealed. And students of mathematics who try to arrive at a mathematical explanation are led to the realization that this science is an exciting one — full of mystery and surprises.

TRI-TETRA-FLEXAGONS, TETRA-TETRA FLEXAGONS, HEXA-TETRA-FLEXAGONS, TRI-HEXA-FLEXAGONS, AND HEXA-HEXA-FLEXAGON ARE ALL THERE WITH EASY CUT-IT-OUT INSTRUCTIONS.

FROM: ERIC ASHBY

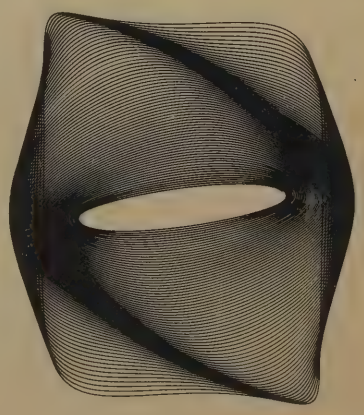
The Mysterious Flexagons

$1.95 postpaid

from:
Crown Publishers, Inc.
419 Park Avenue South
New York, N.Y. 10016

MOTION PICTURES

The HARMONOGRAPH is a very sensitive instrument which visually records the motions of two coupled pendulums. Interaction is transferred to the counterbalanced pen where it blossoms into curvelinear forms. New and complex shapes appear when the weight-length ratios are adjusted. Each graceful configuration is unique and mathematically related to a musical interval. This apparatus is played in "key" and literally "tuned."



The rhythmic lines have poetic parallels in nature's vibrations. Ocean waves, trees swaying in the wind, even the spiralled path of the moon through space are analogous with HARMONOGRAPHIC motion.

[Suggested by Frank Raasch]

Hey Frank — where can our readers get info on this? — ed.

Suggested by Robert Ian Scott
Saskatoon, Canada

I want to suggest a review Osmiroid fountain pens with their points for italic script for the Whole Earth Catalog —

in a ball point age, they make handwriting attractive, legible, an innocent, useful, even inexpensive sensuous pleasure. Use the fine straight italic point for small letters like this, the medium straight italic for larger letters, and the broad or B2 points for signs and serious lettering — or just for the pleasure of seeing the letters shade from thick to thin — to thick again.

The pens cost $1.50, the interchangeable points another $1.50, and they are available from (1) the Pentalic Corporation, 132 West 22nd Street, New York, New York, 10011, (2) the Reed College Book Store, Reed College, Portland, Oregon, 97202 (the Book Store also carries Lloyd Reynolds' manual, Italic Lettering, Calligraphy, and Handwriting; see the enclosed Xerox of its page 17) $1.50 and (3) the E.S. Perry Ltd. factory itself, which makes the pens — Fareham Road, Gosport, Hants, England [which supplies its own pamphlet guide to italic handwriting for 20¢].

Any fountain pen ink will work; permanent black Skrip #32 looks best. Osmiroids are durable but should be rinsed out with water once a week to prevent clogging.

What you see here is strictly self-taught, amateur italic; anyone who cares it can do at least this well.

SPINNING WHEELS AND HAND CARDERS

Made-Well Man. Co.
Sifton Manitoba, Canada

This company is run, I am told, by an Indian tribe. It is located in a very small town in Canada. The company doesn't have a phone; I tried to call once.

They make excellent quality products.

Spinning wheel ca.$45
Cards ca.$6
Carding machine (crank model) ca.$25

These are approximate Canadian prices. They are subject to change periodically. There is also duty when having them sent into the U.S., but I consider the wheel and cards of better quality than any I have seen and worked with. The prices (even with duty) are less than wheels manufactured in the U.S.

They have no outlets; the wheels must be ordered direct.

Now that I've talked about spinning wheels, I guess that I should supply info on where to get wool, flax, etc. to spin.

I work mainly with wool so I know most about it. The best thing to do is ask around, that is the easiest way to get it. Shearing is done in the spring so that is the best time too. It can be stored in plastic garbage bags so you can buy it any time.

White wool is easiest to get. If you don't find a local source, write to the Wool Grower's Association in your state. They sell wool by the pound and it usually runs about 70¢ per lb.

Brown and gray wool are harder to get. They can be provided locally, and this is the easiest way. Otherwise there are many places advertised in the magazine *Handweaver and Craftsman*. I haven't dealt with any of these people but be sure and ask for samples first before buying. It takes a little longer, but is much safer.

Places to obtain flax and mohair are mentioned in *Handweaver and Craftsman* also.

Maybe that should be next. By far the best resource for information about what is happening and what is available in the way of spinning, weaving and dyeing is *Handweaver and Craftsman* — the subscription is $5 (4 issues) per year. The subscription address is:

Handweaver and Craftsman
220 Fifth Avenue
New York, N.Y. 10001
(phone OR 9-2748)

The best book I have found for a beginning weaver (and the cheapest):

Znamierowski, Nell, *Step by Step Weaving* ($1.95)
Golden Press, New York.

This book is well illustrated and diagramed. It is to the point and assumes that you know almost nothing about weaving, but it assumes that you aren't an imbecile. The book is interesting to read and shows how you can put items that you already have to use instead of spending a lot of money on a loom, til you find out if you want one or not.

Craft and Hobby Book Service
Box 626
Pacific Grove, Calif. 93950

The Unicorn
Box 645
Rockville, Md. 20851

These two places both carry it and have a good catalogue of other books on crafts.

The best book that I have found on knitting and crochet stitches is:

Knitting Dictionary: 800 Stitches, Patterns, and knitting, crochet, jacquard technics. ($1.95)

This is the most complete book that I have found. It is well organized and explains things so that if you know the basic knitting stitches you can follow it. Besides being all the above it is small enough to be easily carried with you. When I was in Vancouver B.C. over Christmas, I found one there and latched on to it. Upon returning to school in Ohio, I went to a bookshop downtown and there was a whole stack of them. It's really great!

The *Knitting Dictionary* is distributed in Canada by
Publications Louise, Inc.
826 Rachel E.
Montreal, 176, Quebec
(phone 521-5433)

The U.S. distributer is in New York City, I know that isn't much help. But it's all I know.

There is a great book that is considered the classic on handspinning. It is by Elsie Davenport and is called *Your Handspinning*. Cost is $3.95 and is well worth every penny. It is distributed by Craft and Hobby Service and also by the Unicorn (see above for address).

Diane Senders
Yellow Springs, Ohio

Dulcimers

Here are some more dulcimer makers to add to your list in the January and March Supplements:

* George Pickow
  7A Locust Avenue
  Port Washington, New York 10050

  George Pickow is Jean Ritchie's husband and they make dulcimers in three shapes (teardrop, traditional, and semi-diamond) and with either 3 or 4 strings. The prices range from about $40.00 to $100.00.

* The Magic Mountain Workshop
  Box 614
  Mill Valley, California 94941

  The Magic Mountain Workshop makes a very beautiful dulcimer of the kind described by Howie Mitchell in *The Mountain Dulcimer — How to Make It and Play It — (After a Fashion)* for $100.00 (3 or 4 stringed). They also make psalteries (bowed — $40.00 and Gothic Style — $200.00). If anyone is looking for a hurdy-gurdy, they've got those too for $420.00.

* William Wallace
  19 26th Avenue
  Venice, California 90291

  He makes hammered dulcimers on request for $100.00. They come with 3 or 4 different types of hammers.

* Lynn McSpadden
  of The Dulcimer Shoppe
  listed in the January Supplement also makes fretless banjos if anyone's interested.

* If anyone is interested in making a dulcimer, Howie Mitchell's book, *The Mountain Dulcimer*, etc. (see above) is very good. He's very good for understanding the fret structure and how the thing works. He also has stuff about chorded dulcimer playing and various instruments made from doors and a plan for making a "courting dulcimer" (one played by two people. It's available from Folk Legacy Records, either separately or with a record.

Susan Barger

Squier Strings

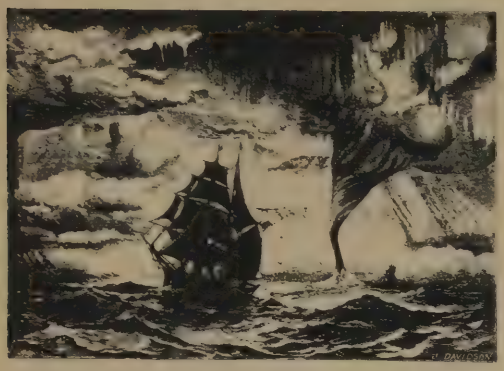
re: suggestion by stan davis for squier guitar strings.

the reason squier strings are so scarce (and perhaps the reason they are so good) is that v. c. squier co. is a very small operation —— only 6 or 8 people. as stan says, though, they are indeed the best string-makers (?) around, and from what i've heard, they offer a service available nowhere else in the country (to my knowledge at least): they will custom-make sets of strings to <u>your</u> specifications. i know of a fellow who gets hand-made smooth round-wound strings with an elliptical core —— easy on the fingers.

any guitarist who really knows what he wants will do well to send them a letter of inquiry.

V. C. Squier Co.
427 Capital Ave. S.W.
Battle Creek, Michigan 49016

Mark Talaba



The Straight Skinny

Reply to a letter in the March issue in the "Other People's Mail" section, p. 22.

P.G. asks "Who's got the Straight Skinny?" concerning shipping out on merchant ships.

Firstly – get your passport and have your occupation listed as Merchant sailor (or seaman).

Second – to ship out on U.S. vessels you need a Coast Guard document which is a plastic I.D. pass with your photo and a "Z" number. You can only obtain this pass from *Coast Guard Merchant Marine Documentation* offices in all major seaports. Look in the phone book under U.S. Government.

Third – here is the hangup! The Coast Guard won't issue new documents to anyone unless they can prove that they have a job. Acceptable proof usually consists of a letter written by the personnel manager of the company who will hire you. Most companies won't hire you without you already having the required document. I include maritime unions in with companies as they, these days, are trying to limit union membership.

Fourth – your chances of shipping out on U.S. vessels are quite slim. Many people were hired to man the ships that ran to Vietnam and the Far East hauling war or war-related cargoes during the last five years. Now they are reducing the war effort and many sailors will be out of work as the government lays up ships.

Fifth – to hire out on U.S. vessels your best bet is to pester the hell out of the maritime unions –

Sailors Union of the Pacific – Seattle, Portland, S.F., L.A. (Wilmington)
Sea Farers International Union – East Coast & Gulf Ports
National Maritime Union – East Coast & Gulf Ports.

Also try tug boat companies – they hire a lot of men and pay very well. Your best bet is to play a "straight" roll. Most personnel managers and Union dispatchers are straight and anti-anyone who does not also appear straight. Having got the job and the required C.G. documents and entered into the seafaring life you will find that sailors don't give a damn what you look like, or how you act.

Sixth and last – shipping out on foreign vessels is a matter of chance. Contact the consuls of each maritime nation – Norway, Denmark, Sweden, Italy, Germany, England, Panama, Liberia, Greece – in each major port city of the U.S. leaving your name, address, and phone number.

Also go to a seaport and go aboard foreign ships and ask for a job.

Also contact Steamship agents (phone book again) and drop a card to the operations manager with name and phone number.

Kevin Mercer

Seattle, WA

Europe, Hitch-hiking, etc.

Concerning girls hitch-hiking (advice from my next door neighbor): Two girls are safe, usually. Carry white-pepper, look the guy over before you jump in. Always outnumber your host(s). If things don't look OK, don't get in. (Ask him "Where are you going?" "Sorry, we're not going that way, thank you." is a good way out.) Don't prick-tease. Unfortunately, many American girls have no conscious idea how their actions look to Europeans. When he says "you're a very sweet girl", reply "please let me out at the next gas station."

On the other hand, the chamber of horrors above is not the average situation. Hitch-hiking is the standard method of travelling for students. If you don't have a companion, you can find one quite easily at youth hostels.

Two girls alone are not safe in Turkey, or points East. Take along a big man. Find out what the "country plate" on the back of the car means.

Get on the road early if you're going far. Long ferries are good to hitch on: walk around and ask people if you can come along. But when going from Copenhagen to Sweden, take the train (or lift) to Helsingor and lift on the Danish side. Sweden is wall-to-wall thumbs.

Gas station maps, especially BP, are as good as the expensive ones, except possibly for the wilder parts of Eastern Europe. They cost about 30¢. Buy them before you enter the country so you know where you are. Eastern European countries usually have very good free maps available at tourist bureaus. City maps are also usually cheaply available.

Linguistics for travellers:

Learn the local words for "thank you" (which can be used anywhere for any purpose). It'll bring smiles, but no laughter. It'll make you a person too: it's unbelievable how a waiter lights up after struggling in three or four half-understood languages. "Good", "no" or "not", "sandwich" and "beer" are also very useful.

While in Roumania for a Linguistics conference, I came down with dysentary, was put quickly and competently into a hospital and had to communicate with the (Sorbonne-trained) doctor in rusty college French. Things got difficult when he asked about selle (excrement) and I heard sel (salt) – the former not being important enough for French 101. Finally the nurse said "kaka?", I said "merde?", the doctor turned bright red, and everything got straightened out. Moral: carry some sort of multi-lingual phrase book with a lot of medical terms. I wish I knew of one.

Things to take:

Carry candy and some food when lifting: bread, cheese, sausage, and fruit are recommended. Families usually stop and picnic.

Things not to take:

See Europe straight. If you have Middle-East stamps in your passport, long hair, etc., you shouldn't be surprised if you are inspected pretty thoroughly, to the great annoyance of your driver. (Swedish customs are known to take Volkswagens completely apart.) The coast road from Istanbul to Salonika should be avoided as there's a customs inspector who loves to bust people. I heard this from a Britisher who got the full treatment (he was innocent, besides).

Books:

$5.00 a day is . . . well, try to live on this budget in America and you'll see how possible it really is. *Lets Go* was good in '66. Join the youth hostel movement. Every city of any size in continental Europe has one. The European student travel services organize train and plane connections all over Europe. Buy their guide in Europe, not in the USA.

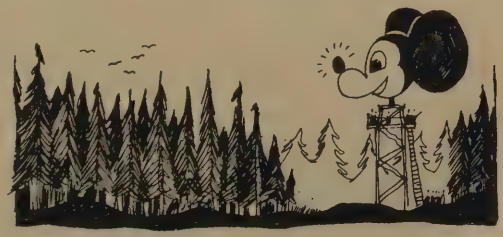
When trouble comes:

Smile, look stupid, don't argue. (Read *The Naked Ape*.) Contact the American Embassy and don't admit to understanding anything but English. I didn't take that advice in Bulgaria and got screwed by their state auto-insurance scheme.

Costs:

Driving your own car: about $5.00 per day average running cost for a small car (Fiat 850). Hitch-hiking, sleeping in hostels and camping places, I wouldn't budget less than $400 a month.

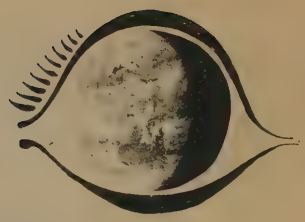
Martin Minow
Bromma, Sweden



BEFORE DISNEYLAND

In Manchester, Tennessee there is something called the Old Stone Fort State Park which people passing through Tennessee might be interested in. The Park is right by the big duck and the little duck rivers and there are at least seven waterfalls within a mile. The state owns the land but they have not improved it at all and so do not charge anything for people to stay there. Some people might like to stop by before it becomes a disneyland.

Otto R. Salassi
Tullahoma, Tennessee



See the World . . .

We've got fine vacation news for suburban guerrillas, or for that matter, anybody up for a trip. Make Peace Corps your local travel agency at no expense to you.

If you want some time to think, adequate salary, easy and fun job, free medical care, free dental care, many profusely illustrated publications, and other gratuities, take advantage of the free offer. The U.S. government can be penetrated "like cheese-cloth". It's full of holes to breathe through.

Chances of acceptance are high, especially for people who can make things grow. If you can't make things grow you probably qualify as an English teacher. The more under-developed the country, the more loosely defined the job. If you want to make a big deal out of what you find yourself doing you can, but if you're not that type then let the Peace Corps be your reality trip. You might end up with a Maharishi in your own neighborhood.

Training usually amounts to a 6–10 week commune. Our program trained on a ranch near Rocky Mountain National Park – an instant plastic community with coop general store, nightly dancing, feasting together, mountain climbing, even our own mythology. We also learned a foreign language. The same kind of language course we got would cost a couple thou at Berlitz. Other training programs have taken place in Mexico, Canada, the Virgin Islands, and all over California. The trand in Peace Corps training programs today is to choose a salubrious place where volunteers will feel a sense of oneness.

Peace Corps employs thousands of volunteers in countries all over the world – Morocco, Afghanistan, Nepal, Micronisia, India, Peru, Sierra Leone, and other places you might like to know. It's usually no problem enjoying the better aspects of the natives and retaining what you are at the same time. If you don't dig the natives you can work along with them anyway.

Peace Corps volunteers get two days of paid vacation for every month of service. That means 48 days accumulated vacation for two years of service. During vacation you get nine dollars a day just to subsist on. One volunteer visited five countries his first year of service – Spain, Tunisia, Sicily, Italy, and Greece, spending no less than two weeks in any one country. A skillful volunteer could easily beat that. Counting local holidays, Christmas vacation, summer vacation, spring vacation, and unexpected surprises like International Moon Day or a sudden coup, a volunteer could easily push five months in days-off during a single year.

Despite recession in the states Peace Corps salaries have been going up recently. In less than a year's time our salaries have increased by 33%. With our excess subsistance allowance we've bought a lot of handmade rugs and blankets worth thousands in the states if you need retirement money.

The necessary information is available through Peace Corps, Washington. When you read Peace Corps material, use your imagination. Don't be turned off by jargon like "volunteer spirit" and "effectiveness". In most countries lack of communications make bureaucracy virtually impossible. You are necessarily left alone. Improvise. Take a stereo and plenty of books you've been wanting to read. If the Peace Corps charters an airplane to fly your program to its site, there is practically no limit on baggage weight.

Regardless of when you leave the Peace Corps you get 75 dollars for every month of service abroad or about 1500 dollars after two years, plus free air fare back to your suburban camp. The Peace Corps will even find you another job.

And the whole two years is a free-trial period. If for any reason you con't like what you're doing, Peace Corps will pay your way home at any time.

Write Peace Corps in Washington and ask for a hand-book. Ask for special information on the country of your choice. Inquire about training programs and fields open to volunteers. Everything is free of charge. The whole trip costs you nothing.

Quotations from Peace Corps literature:

The change in attitude many Volunteers have after the initial novelty of living abroad has worn off is sometimes striking. The fire of enthusiasm they brought with them turns to ashes not long after they encounter the first misunderstanding, the first reluctance to change traditions based on the heritage of generations. Instead of attempting to affect the attitudes around them, however slightly, they begin in some respects to adopt these attitudes.

Going from the ordered routine of training to an unstructured job overseas has sometimes been compared to running off the end of a pier. Suddenly there is no solid footing underneath; often there is not a staff member or an instructor in sight, and it's up to you to sink or swim.

The work of a volunteer is largely a matter of individual definition.

Emergencies: The best advice here is to use your common sense.

Neither volunteers nor staff members may pilot air-craft during their service with the Peace Corps.

Mobius Polymers Unltd.
Tunis, Tunisia

Any of you veteran volunteers care to comment?

?"PRIMITIVE WEAPONS"?

Compared to firearms, the so-called "primitive weapons" have several advantages: they are simple, light, cheap, and versatile in use. They require no ammunition you can't make yourself – and although you can reload some kinds of firearms ammunition, you will eventually run out of powder and primers. Except in places like New York City, you have no legal hassles over ownership or registration with "primitive weapons". These weapons are perfectly adequate for hunting (or our ancestors would not have survived), if you will practice with them. They are silent in use. In some cases, they exhibit amazingly advanced understanding of technically advanced concepts and principles – the boomerang operates on the principles of the airfoil and gyroscopic precession, etc. They are fun to play with, and if you use reasonable care and do not endanger others, you can usually play around with them in a lot of places where it is illegal to practice with firearms.

Boomerangs – As mentioned, the boomerang works on the principles of the airfoil and gyroscopic precession. This is not a toy, but a hunting and fighting weapon which works very well on small game, especially birds in flight. More fun to play with than a frisbee, but don't ever forget that it strikes with tremendous force due to the rapid rotation of the blades. The best ones I know of are made by Colonel John M. Gerrish, 4409 S.W. Parkview Lane, Portland 1, Oregon. These are plywood booms that weigh the same as a baseball, and he also makes a heavier hunting type with lead weights set into the blades. His booms are about five dollars depending on the model.

Blowguns – Not to be confused with a kid's peashooter. You don't need poison darts either, at least on small game. A four foot length of half-inch aluminum tubing develops enough velocity with a light dart to give results about like a .22 rifle up to 25 yards or so. This is silent, as accurate as a rifle, and with practice can develop a high rate of sustained fire if you care about that. This weapon is so simple that you can make your own very easily – using half inch tubing and making darts out of lengths of steel (like cut off knitting needles) set into golf tees for bases. Use a mouthpiece of wood or rubber, etc. for your lips to press against. If you prefer to buy one, try Survival Research Company, 71 Ridge Crescent, Manhasset, New York 11030.. Another source: the Wham-O Manufacturing Company, 835 E. El Monte Street, San Gabriel, California 91778.

Crossbows – The modern resurgence of interest in regular bows and arrows is well known, but the crossbow has been neglected for some reason. This is strange, since the crossbow is, in its usual form, much more powerful than conventional bows, more accurate (for anyone except experts with the conventional bow) since you do not have to exert muscular effort while aiming the arrow, and considerably easier to learn to use than is the conventional bow. Crossbows with steel bows cut from automobile leaf springs may be made to pull at several hundred pounds, while the conventional hunting type bows seldom run much over fifty. This means that if you are good enough, you can use a heavy crossbow to pot at that deer two hundred yards away or so. Light crossbows may be comfortably set by hand and are sufficient for small to medium game. They are silent and can be nearly as accurate as a hunting rifle within their range, which is nearly as great as that of a firearm in many kinds of terrain.

If you want to make your own crossbow, you might try to locate the "C" volume of the old Popular Mechanics Do-It-Yourself Encyclopedia, which had an excellent article under "Crossbows". This is a fairly complicated job, however, so unless you are a skilled craftsman in wood and metal, you might prefer to buy a crossbow. Wham-O Manufacturing, listed above, sells one in the $30–$40 price range. Another source: George Stevens, Huntsville, Arkansas, or Dave Benedict, 20601 Covello Street, Canoga Park, California. The crossbow is one "primitive" weapon which is efficient enough to be subject to a certain amount of legal restriction – so you might check out your local situation in that regard. Also, some states now have seasons and areas reserved for hunters using bows or crossbows, and if you are a meat hunter this could be important.

William Kirby
Portland, Oregon

Preen Your Disks

About Roger Knights' suggestion of the Parastatik Disk Preener from Cecil Watts. Like so many other British products, it is quite a bit cheaper from the manufacturer. Against $5.50 from Sam Goody's, it is $.81 from Cecil Watts Ltd., Darby House, Sunbury-on-Thames, Middlesex. It might be nice to include postage, though I think they might take care of it themselves.

Jerry Minkoff

NOT SO "PRIMITIVE" WEAPONS

This company offers reproductions of muzzle-loading firearms (pistols and rifles – BOTH percussion cap and flintlock). All parts and accessories offered.

i.e. Flintlock rifle – overall length 55½", weighs 8½ lbs., .45 caliber 7 groove 13/16" barrel mounted curly maple stock. $295.00 plus $3.00 shipping.

All kinds of powder horns, flasks or the components to make your own. Bullet molds, stag slabs for knife handles or pistol grips.

Sheffield knife blanks, requires handles only. Highly polished and handhoned.

6" Bowie $3.50

4" Skean Dhu $1.50

Tricorn hats $12.00

Deerskins, patterns, tools for making hunting shirts, moccasins

Books on firearms.

The best buy is tomahawk kit, hand-forged head, hardwood handle, wedge, thong & decorative brass tacks. $5.95 postpaid. Perfectly balanced for throwing and an excellent light belt ax as well as an efficient weapon.

Tomahawk heads	cast steel	$5.50
	cast brass	$6.50

A catalog is available for $1.00 from:

Golden Age Arms Co., Inc.
Post Office Box 83
Worthington, Ohio 43085

Submitted by
Kenneth Cowing
Meriden, Conn.

Survival, Inkle Looms, Clones

We are rather amused that so many people have recently become concerned with survival practices. Some seem to think it is something they discovered. For over a half century we have raised our vegetables and fruit, built our home, repaired our machinery and have "done our own thing."

In our "retirement" we are as busy as ever with all kinds of handicrafts, gardening, research, photography, and enjoying living.

If any of your readers are interested in inkle looms, I am making them from many of our native hardwoods. I also construct my bows from yew wood and my arrows from wooden shafts and footings. Plastics and fiberglass have taken away much of the "wichery of archery."

Cross pollination of fruits and of vegetables and the raising new clones from your seeds can occasionally produce types which are better than those sold commercially.

We grind our prunings into mulch and return the compost to the soil. The burning ban should encourage others to follow this practice.

LeRoy D. Smith
Oakland, CA

Anonymous Suggests

Diving equipment – Buying diving equipment by mail is a very unsatisfying experience. While there are at least two shops that sell at wholesale – New England Divers (Supplement) and Central Skindivers, 160 Jamaica Ave., Jamaica, N.Y. 11432, these suppliers do not have the facilities to test each piece of equipment before it goes out. The quality of most of the equipment from the largest suppliers (especially U.S. Divers) is so poor that in my experience about half of the equipment must be returned for exchange or refund. This is a process that with larger orders can continue for a long time, even though the above listed concerns are extremely nice and prompt in standing behind what they sell. Unless you like to have a large correspondence or are some sort of postal freak, buy as near to home as possible for better service.

At least one equipment manufacturer (Scubapro) has a hard line – no discount policy on their stuff – which is quite good equipment. If enough people try to break the franchise system maybe their prices can be brought down to a reasonable markup.

DO NOT think that because you have a certificate from a pool-taught diving course you are ready to dive in the open sea, especially with tanks. Lots of people have space hangups and if you get in a situation where there are no sides to the pool you just might freak out in a singularly decisive way. Go at it slow.

On some parts of the west and east coasts it is possible to pick up small bread by harvesting seaweeds. This doesn't require any equipment, if done with care will not disturb the environment, can be done any calm day, and the products manufactured there-from, while used as food additives are at least natural and biodegradable as well as being safe.

For those interested in a no bullshit approach to seafarming please consider *Farming the Edge of the Sea*, available from Fishing News Books Ltd., 110 Fleet Street, London E. C. 4 for £4 5s. Much of the crap written on the subject ignores economics, but his profusely illustrated and well written book is straight.

The same outfit can provide you with some neat books on fishing and the realtime problems of the world fisheries which are going to hell at a log rate.

Fish Protein Concentrate – The status of FPC is as follows: the Bureau of Commercial Fisheries has been fighting the FDA for years over whether fishguts, heads, scales and tails are "filthy". The ineptitude of the FDA in this matter at least is shocking to the core. For more information, write Cardinal Proteins, Canso, N. S. Canada; AB Astra, Gothenburg Sweden; or the Bureau of Commercial Fisheries. Looks like FPC will be used as a food additive in the overdeveloped countries for at least the next decade.

Another source of information may be the FAO in Rome. This is the Food and Agriculture Organization of the U.N. although it should be available from New York.

Modern definitions: Bastard – a guy who says he is concerned about the environment and owns a car with more than four cylinders.

Swine (as opposed to pig) – an ecologist or environmental biologist who has not volunteered his services to an industry to actively do something about the goddam mess.

Fool – one who thinks the recognition of a problem and walking around looking kinky with a bunch of signs will cause the problem to disappear. This condition can be equated with a total ignorance of economics, a disregard for the fact that human intelligence or ability assumes a bell-shaped distribution (with half the folks on the lower end), and the refutation of the fact that revolutions must be prepared from within a society as a function of the complexity of the society.

Anonymous
Bald Rock, N.S.
Canada

(Well, kinky looking to you, too. – S.B.)

Against AAA

There was a suggestion in the March 1970 supplement about AAA. The advantages listed were (1) free towing, battery jumps, emergency gas delivery; (2) free up-to-date maps; (3) insurance discounts; and (4) bail for misdemeanor traffic charges.

What was not mentioned is that AAA has long been notorious in its push for more and more freeways, and vehemently against any efforts to divert some gas tax money to the alternatives, such as fast and pleasant mass transit. If you get sick of reading their propaganda in their monthly magazine (as I did a couple of years ago), you might consider not renewing your membership (load up on free maps first). You can buy towing insurance from your own insurance company whose rates (in my case, anyway) were cheaper and you can carry jumper cables (mine are five years old, work fine, and cost me 79 cents). I don't know what to do about bail. For up-to-date maps, your card-carrying friends generally are happy to get them for you.

Bury the Embarcadero freeway!

Lance J. Hoffman
Menlo Park, CA

CO Jobs

I am writing in response to a letter from Randy Chakerian of Seattle, Washington which appears on page twelve of the January 1970 issue of the Whole Earth Catalog. Mr. Chakerian writes: "... there are a hundred agencies around the country for helping you get a CO classification, but none to help you find a half-way decent job afterwards. ..."

Enclosed find page from the Fall 1969 World Service Bulletin, published by the Unitarian Universalist Service Committee, Inc., 78 Beacon St., Boston, Mass. 02108. Circled article discusses two of their publications, the I-W Job Finder and the I-W Manual (which is now in print), specifically designed to assist CO's in finding civilian work.

UUSC has become the major clearing house in the United States for job information suited to particular needs of Conscientious Objectors (1-0 registrants) looking for alternative service.

"A major new phase of UUSC's program is coordinating and publishing the *I-W Job Finder*, the only regularly printed bulletin listing available jobs that would provide two years of alternative service," reports CO Placement Coordinator Antony Lob. "This bulletin will be distributed nationwide about once a month on a subscription basis to groups counseling COs."

Paul Crapo
Waltham, Massachusetts

Ham Telegrams

While I was in Halifax, I saw a notice on the bulletin board in the Dalhousie University Student Union Building. You may already be aware of its general contents, but I'm going to lay it on you anyway. It read as follows:

Free Telegrams

(all messages are kept confidential)

Anyone wishing to send a message to friends or relatives in the U.S. or Canada may do so free by calling 429-9715 (a local Halifax number) between 6 and 11 P.M. any night and asking for the ham radio operator. This service is provided free by "hams in the U.S.

I enclose this notice because on p. 48 of your March issue, Bill Levy writes "I'm getting tired of rapping out weather reports to morons." Perhaps public notification in your Catalog that this free telegram service was available would alleviate Bill and his fellow hams of some of their boredom as well as providing a useful service.

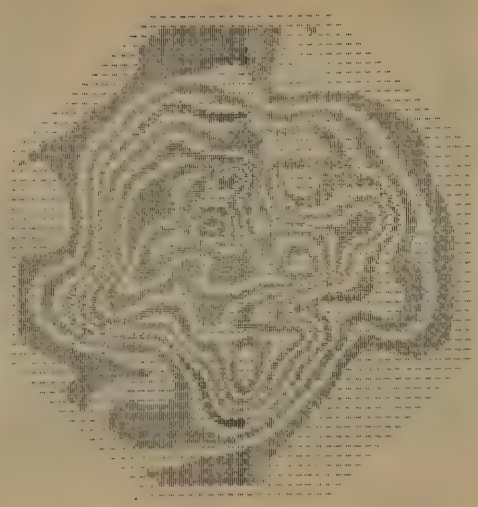
If you don't know a ham in your area, the people at the American Radio Relay League, Newington, Connecticut 06111 (the address Bill gives) could give you the name and phone number of one.

Dave Keirstead
Saint John, N.B.
Canada

Libraries

One of the things that struck me when I first encountered the catalog was that many of the books you have suggested or others have suggested are in the collection of even the tiny branch that I work at. The point being that Americans don't use or appreciate the libraries that their taxes support. A good strong plug for people to use the library first to find material (saves buying a book sight unseen and being dissatisfied) and reference to further material and places to look for it would be an aid to those needing information. Granted one in the wilds of the backwoods has little opportunity to stroll down the block to his local library however most people still have contact once and a while with some sort of town. Now many states have a complete regional library system that allows one to borrow books from anywhere in the state. This process is only as slow as the mail and the librarian's willingness to help. I know the average person's image of librarians is of a crotchety old maid etc. and this I would have to agree with. But things are moving pretty fast back there in the stacks (how many of us were conceived there), there are hundreds of younger hip librarians and library students invading these tombs of learning. One thing they've found is the older librarians are bitchy because they are frustrated radicals from another era. The resistence to suggestion and criticism from the youth in library circles has not only been low, but the most flaming radical has been welcomed as an ally by older librarians. The concept of librarianship as custodians of books is out the window. The job is now getting information and IDEAS to the people. The smaller the branch the more the librarian is eager to help. One, he's all alone and has few colleagues to help insulate him from the outside; two younger people don't enjoy the hack work that has in the past been the librarian's excuse for lack of time to service the public. It's a good feeling when you help a person take a step closer to knowing himself and his world and librarians aren't insensitive to this. We have all the modern technology at our figure tips though sometimes we have to be prodded to use it. Like, why buy BOOKS IN PRINT when your library has it (it isn't complete either; ask anyone in the publishing industry). Virtually all libraries are your entrance to the Library of Congress.

Warren L. King
Free Library of Philadelphia
Philadelphia, PA



Intelligent Computers

I've been bumming around the country lately, trying to see where I would lead me. And of course one of the places I eventually would up was inside my own head, the primary content of which is a lot of scientific information that I'd never really sorted through before.

My latest flash was about computers, which I do know a little about already. Specifically about intelligent computers, which nobody knows anything about. It involved assembling what I know about neurochemistry (my main field of scientific interest) with a lot of stuff about animal behavioral psychology and the history of the development of mathematics and a dash of Zen. The result was that I scared the shit out of myself and quit before I had translated it all into machine language, which I don't know anyway.

The point is that it is too valuable to lose and too powerful to let IBM or the Pentagon come up with it on their own, especially since it looks like the only way an intelligent computer could remain sane would be if it believed itself to BE the planet earth.

I would like to sit down with a bona fide computer genius with an island psychology and a bit of stock in the human race and try to work this thing through with him.

Ken Colstad
Hardin, Montana

I know just the man. Ken Colstad. — S.B.

Keith Gilbert

Over one month ago we sent a letter to Keith Gilbert about the Charlottes — yesterday we received the enclosed letter — it seems that even the Rabbi's mail is opened. Has this happened to others? Please let all know of this before they start sending info & questions to Keith as we did.

State of California —
Human Relations Agency
Ronald Reagan, Governor
Department of Corrections
CALIFORNIA STATE PRISON
San Quentin, California 94964

July 3, 1970

Mr. & Mrs. Howard Davis
East Lempster, New Hampshire
03605

RE: GILBERT, Keith
B-4754

Dear Mr. & Mrs. Davis:

It is extremely necessary for you to cease and desist any further correspondence with our inmate GILBERT. This is illegal and not approved by San Quentin Prison's Mail Regulations.

Thank you for your courtesy in this vital matter. We prefer not to receive mail for GILBERT from you again.

Yours very truly,

L.S. Nelson
WARDEN

By: Wayne A. Bartels
Associate Warden
Classification & Treatment

Lilies and Lotus

The Van Ness Water Gardens carries a wonderful selection of Water Lilies — both hardy and tropical and also the sacred Lotus — they will send you a free catalog on request and therein you will find beautiful pictures and descriptions of the lilies and lotus they offer.

Also in this catalog you will find complete instructions on growing lilies, their requirements and information also on building lily ponds — curing them — planting and natural balance of a pond. They also sell many beautiful goldfish — water plants and snails. There is a list of helpful books in there also!

In my limited dealing with them they have been very nice to me and very pleasant to deal with. You can visit the Gardens on Thurs., Fri., Sat. only between 8:00AM — 5:00 PM — the other days are closed because of packing and shipping because they ship all over the world. Address of Water Gardens —

Van Ness Water Gardens
2460 N. Euclid Avenue
Upland, California 91786
Phone — (714) 982-2425

They also are familiar with the organic growing method and practice it also.

Having a frog pond gives such joy and serenity! Visiting the Zen Temples in Kyoto gave such a indescribable feeling especially the peaceful ponds! I hope this information opens new experiences for people.

Paul & Toni Goldenberg
La Habra Heights, CA

RE: WHOLE EARTH CATALOGUE

What a great idea!

And what lousy execution!

Whatever became of such simple virtues in publishing as: organization, simplicity, readability?

This has got to be the biggest publishing mess that was ever foisted on an unsuspecting public.

If it's a put-on, the joke's over. Now, for God's sake, print something that is readable and salvage a good merchandising concept.

JFH/lt

John Hinde
Toronto, Ontario
Canada

no comment ?

INCREASE YOUR INCOME

CHICKEN MANURE SOURCE: ***Strombergs* has a catalog listing and illustrating all kinds of chickens to "increase your income". It's a good catalog, but *Strombergs* also sells ocelots, chipmunks, monkeys, owls and other "pets" which seems like another one of man's techniques for spoiling the earth. – Ed.**

For catalog, write to Stromberg's
Box 717
Fort Dodge, Iowa 50501

OUT-PUT YOUR INCOME

CHICKEN MANURE FUEL: "Put a chicken in your tank" may never match the zap of Esso's "Put a tiger in your tank" slogan. But British inventor Harold Bate will tell you that chicken power will run your car faster, cleaner and better than gasoline.

Bate has found a way of converting chicken droppings into gas – and runs his automobile on it.

By processing methane gas from rotted chicken manure and feeding it to the engine through a special device he invented, Bate says he has managed to drive his 1953 Hillman at speeds up to 75 m.p.h. without the use of gasoline.

At his farmhouse in Devon, Bate, 62, told an ENQUIRER reporter:

"This is the thing of the future . . . all you need is a couple of buckets of manure, a tin drum and my carburetor conversion device, and you're in business."

Bate's "chicken coupe" has been investigated and upheld by the British Ministry of Transport.

"We've looked into it," Frank Standing, information officer for the ministry told the ENQUIRER, "and the device works perfectly.

"However, as to mass use, that seems doubtful. There is simply not enough of a supply of chicken manure to provide fuel for autos on a mass basis."

Bate says he has been running his car and five-ton truck on the methane gas – as well as heating his home with it – for years.

"The method is really very simple," Bate said. "You just put about three buckets of manure into a sealed oil drum. Put a small oil heater under the drum to keep the manure at a steady 80 degrees.

"There are two microbes in the manure which, when heated, eat each other – this produces the gas.

"You can collect the gas in bottles or in plastic balloons for storage. Then all you do is feed the methane through an adapter into your carburetor – and you've got chicken power.

"I keep replenishing my manure supply. I run my car for about six months before I clean out the tank and start with fresh dung."

Bate said the conversion from gasoline to methane power can be made in two hours and requires no special tools. The only engine alteration required is the installation of Bate's patented device which feeds the methane from the bottle to the carburetor.

The gas, sucked into the engine by the cylinders, is ignited in the usual manner by the spark plugs to produce power.

Methane is not only cheap and efficient, said the inventor, but it is better for your car – no carbon deposit on your cylinders and no engine wear and no poisonous carbon monoxide fumes.

Bate sells his auto conversion device – with instructions on how to manufacture your own methane – for about $14.

(Taken from National Enquirer *June 1970)*

HEALING IS FOR TO BE DONE!

You know that vitamin B_3 (nicotinic acid or niacin) is the fastest, cheapest, most effective and most natural, non-damaging agent for ending an LSD experience – for "coming down."

"Megavitamin" therapy (use of high, regular doses of B_c– anywhere from 3 to 20 grams daily – sometimes with equal amounts of vitamin C and/or other agents) is also a *cure* for several major diseases.

B_3 is the core of a new therapy for *curing* "schizophrenia;" (for the first practical, clinical definition of "schizophrenia" as a disease, and for good definition of "megavitamin" therapy, see book, *How to Live With Schizophrenia,* Abram Hoffer & Humphry Osmond (University Books, N.Y., 1965) – written as a handbook for schizophrenics and family and friends who wish to help bring them back to "normality"; probably hints, sometimes knowingly & sometimes not, about more miraculous possibilities than any book I've read)

B_3 *cures* arthritis and rheumatism;

(Turn on a grandmother with B_3 and C! It's a high by itself – and it heals. It's also cheap & harmless. The authority on this use of B_3, who first published conclusive results 25 years ago, is: Dr. William Kaufman, 540 Brooklawn Ave., Bridgeport, Conn.)

B_3 is a *cure* for aspects of alcoholism;
(it removes depression which impels many to drink; it prevents excessive alcohol consumption; it controls and stops, quickly & neatly, delirium tremens – the "d.t.s"

See another Hoffer & Osmond book, *New Hope for Alcoholics* (University Books, N.Y., 1968), which is the authoritative source for information on the best, most effective alcoholism cure yet: LSD therapy – to which B_3 is an important adjunct.

See also the manual issued for the physicians of Alcoholics Anonymous by the AA founder, Bill W., P.O. Box 461, Bedford Hills, N.Y. 10507 – but don't tell him I know it's AA connected; he wants it to be anonymous . . . Manual on B_3 in relation to alcoholism & other maladies . . .)

B_3 prevents senility and, where caught in time, reverses it;

B_3 is a *cure* for several heart conditions, controlling "lipids" – the cholesterol level in blood, etc. (Currently being used extensively in this area by the National Heart Institute in a long-term, comparative test of effectiveness, etc.)

TO J.D. FROM IGOR

A short time ago you ordered the 3-View Drawings, Photos, and Specifications of the Bensen Gyrocopter. By now you have had time to study them and to decide that, like many others, you too, can build and fly this simple and popular whirlybird. Why don't you go ahead now and order your detailed Construction Plans with Building and Flying Manuals? I can still make them available to you for just $27.00, for a limited additional time. The joy and fun of personal flying can be yours so easily if you act now!

As a BONUS, if you order within the next 10 days, I will make a gift to you of a one-year Membership in the Popular Rotorcraft Association. By special arrangement with P.R.A., this $9.00 membership will entitle you to receive free for one year, a subscription to their Magazine, POPULAR ROTORCRAFT FLYING. If you are already a member of P.R.A., this $9.00 contribution will extend your membership for another year.

Here is what Mr. Roy Clifford of Michigan, one of many enthusiastic owners of Bensen Gyrocopters, said about his bird: "I have owned eight airplanes . . . but it wasn't until today that I made my first flight in a Bensen. To say that I was delighted and fascinated is the understatement of the year. Never in all these years of flying have I been so thrilled! . . . A working man can easily afford it, and it is so simple that a novice can be in the air in perfect safety in only a few hours."

Just think! Now you, too, can zip through the air, free as a bird, in your own Gyro. Others are doing it, so why not you? Don't say, "I can't afford it" because you can build and fly a Bensen at a very low cost. Order the Construction Pland now on a 10-Day no-risk inspection trial. If you are not completely satisfied, return the plans to me within 10 DAYS, and your money will be refunded. Fair enough?– then give it a try. Be a man of action, ORDER NOW!

Sincerely,

Dr. Igor B. Bensen, P.E.
President

P.S. If you order the Plans withing the next 10-days, I will send you still another gift: a set of Rotor Trim Tabs, which are an important part of the Gyrocopter. Don't let this opportunity slip by! IBB

FREE CLINICS EVERYWHERE – pencils, stamps, envelopes and minds ready!

A relatively simple diagnostic test based on a urine analysis is now available which can detect the presence of a factor
- which *causes* the well-known (well-feared . . .) "psychotic" reaction to LSD
- which indicates the presence of schizophrenia
- which is present in the majority of chronic alcoholics (who must, therefore, be cured of "malvarianism" – by megavitamin therapy – before they can take LSD therapy)

In other words, you can predict the occurence of a psychotic reaction, you can prevent it (by knowing it), *and you can cure it* (by the megavitamin therapy, cheap and easy, described in the doctors' manual on the subject of schizophrenia, alcoholism, and the "malvarian" factor – that's the name of the nasty –

(manual) available from:

Dr. Abram Hoffer
800 Spadina Crescent E.
Saskatoon, Saskatchewan, Canada

or: Dr. Humphry Osmond, Director
Bureau of Research in Neurology & Psychiatry
Box 1000
Princeton, New Jersey.

To everyone everywhere with burns
who might get burned
who wants to be prepared in any case:

Have somewhere within reach, then, at all times, a good supply of Vitamin E (d-alpha tocopherol) in oil form (not just "wheat germ oil" or whatever; make sure it's the real stuff) in 100 mg or I.U. (or higher) capsules. When burned, pierce capsule with needle, apply oil directly to burn. If burns are extensive, take internally, too.

Vitamin E (d-alpha tocopherol) stops pain immediately on application, and heals as quickly as applied (if applied immediately, a small burn will completely disappear within an hour or two; if delayed, healing will take that much longer).

See Adelle Davis, *Let's Get Well.* See also personal experience and observation.

Daniel Marston
Byfield, Rugby,
Warwickshire, England

TURN, TURN

Dear Folks;

It occurs to me that one of the problems with the "ecology" movement is that the apparent primary focus has been on environmental pollution. Whereas the concern for repairing our environment **is** terrific, and can be a great way to get personally involved, ie. cleanup campaigns, recycling, etc., the real problem lies in the thinking, or lack of it, that got us into this mess in the first place. Our environmental problems are obviously the **result** of a process that cannot continue operating as it has done in the past. We need to re-evaluate our national goals and ideals, in the hope of bringing our system more in **balance** with the natural systems. We need to develop a national "eco-logical conscience." In order to achieve this as a nation, as individuals we need to examine our **own** desires and rationales - to develop a personal **"eco"-logic**. this could be a way of looking at things rationally and logically, but with one major premise - can the earth sustain my desires, and those of my fellowmen. **"Eco"**-logic would then be the qualifier or mental "seive", to aid your decisions on proper courses of action that would be more in accordance with the rest of our earth eco-system.

Along with the development of a personal **"Eco"**-logic might come a more spiritual understanding of our inter-relationship with the rest of the inhabitants of the earth, and the earth itself. A recognition of our common origins, or **"Earth-roots"** with all the other living and non-living things in our **whole** environment, something to connect up to and "get our heads together" over.

Hopefully, we **can** get together over this **'real-life"** problem, and start a transformation of the condition we find ourselves in - but we **all** have to help - be another **transformer**, and help spread the word.

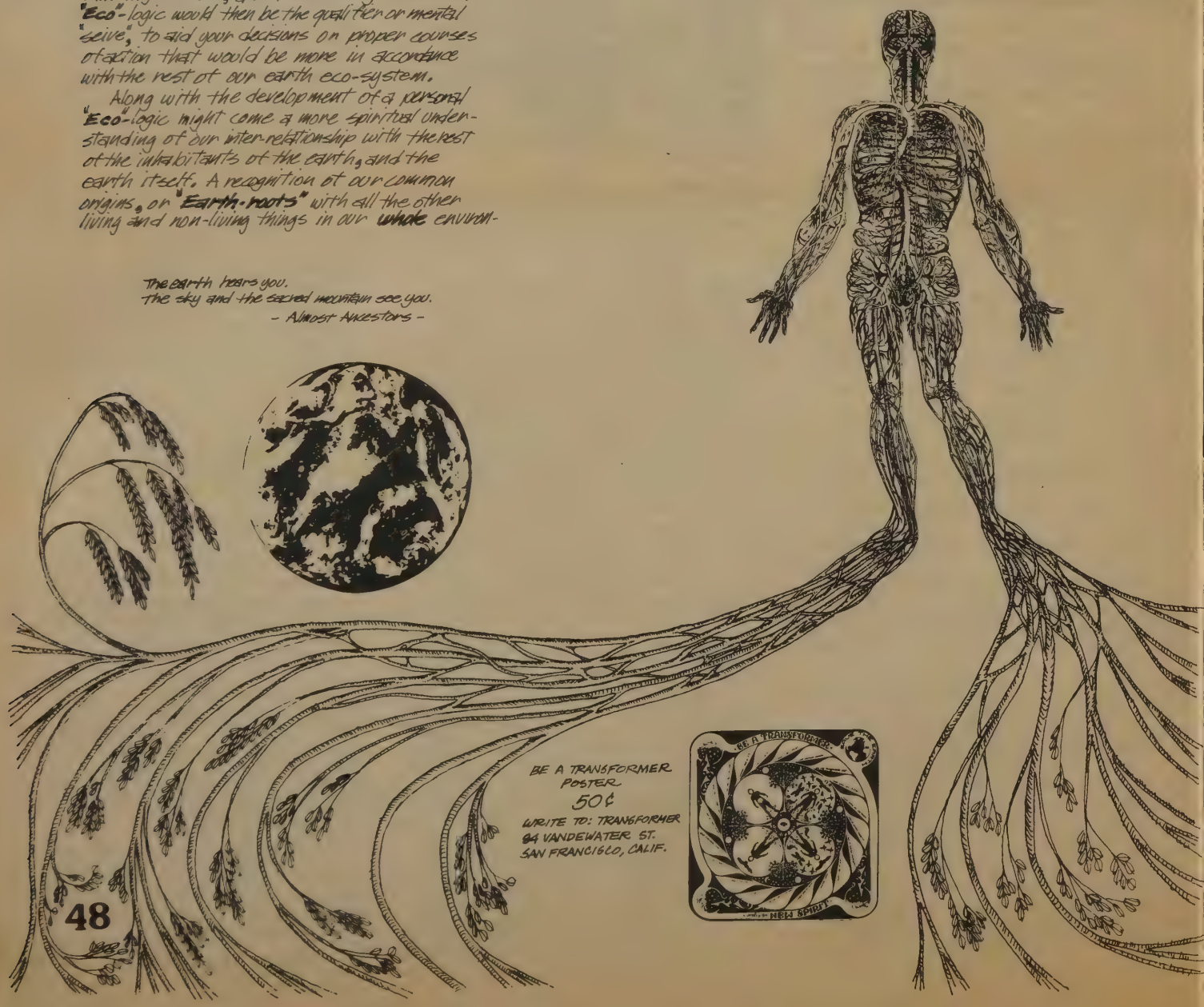
a Transformer

When there were many of my people they danced and sang stamping their feet hard on the earth.
This kept the earth from tipping and the ocean from flowing into the river.

- Almost Ancestors -

The earth hears you.
The sky and the sacred mountains see you.

- Almost Ancestors -



BE A TRANSFORMER
POSTER
50¢
WRITE TO: TRANSFORMER
94 VANDEWATER ST.
SAN FRANCISCO, CALIF.

?...

i've got a few things to mention and a few things i'd like to know.

i'd like to mention merse's tapes. he hitchhikes with tape recorder. sofar he's got an auctioneer who's talking about going down to where the roosters fuck the hootowls and ripping off antiques and pushing them to the city slickers. he's got a truckdriver in a big old noisy rig . . . . "shit yes. with sixteen foreward, you gotta keep shifting." and an awol, and a couple of nebraska high school graduates, all headed for california. and a bunch more. somebody should think of a use for them.

i'd like to mention carl wyant's poem:

when the lady crossed her legs
i was fifteen.
i was amazed at my age.
i did not hate her then.
i also decided to draw her legs.
it was one of the best ideas
i have ever had,
though it turned out to be pointless.
eventually i could only remember her glasses
were purchased by her father.

then there's the skills exchange idea. its easier to learn carpentry from a carpenter than from a book. people should pass their skills on to somebody else. if you have a skill, and would like to use it, or pass it on, write to me. and if you need a skill write to me. i see a cardboard box full of names and geographical divisions, being plugged together now and then.

and then there's spiritual things. holy people don't write many letters to the catalog. maybe holy men aren't into writing. we do get literature from holy places. like

The Order of the Universe Magazine
from:
Tao Books
303-B Newbury Street
Boston, Massachusetts 02115

they're into The Way of Eating, using diagrams. they call them spirals. vortex might also name them motions.

i'd like to know

the manufacturer of three quart paddle-type butter churns . . . once made by *Dazey Churn and Mfg. Co.*, St. Louis. our sources say that dazey was sold to *Lander, Frary, and Clark*, in New Britain, Connecticut, but since neither the *Thomas Register* nor the *ATT* information system knows of *LF&C*, we're stuck. if you know, let us know.

the manufacturer of sheepherders wagons; fourwheel rubber-tired, canvas covered wagons wtih stoves, bunks, etc. *Mother Earth News* recently ran an article with sketchy plans for one, but I have a feeling someone builds them commercially. a couple of summers ago when pam, bob retke, and i were up above sheridan, montana, there were about ten of them parked in a circle, maybe used by a church camp. i've seen a few across nevada.

independent toy makers, not the big factory shit, but nice little toys made by nice little elves somewhere.

the procedure for obtaining mechanics' manuals for american-made automobiles. not the owners handbooks. the how-to manuals. the chrysler corp. lets its customers know that the manuals are available, but we're looking for the addresses, prices, availability, etc.

correspondence with someone who is using hydraulic rams in their water system.

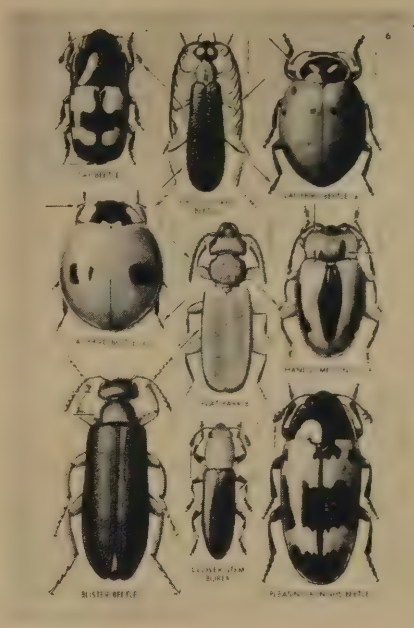
correspondence with someone who is able to plot change, using spiralic or vortexical models; others who are into self-reflexive conjunctions, infinite mirrors, time conception, whole track awareness, eerie experiences, cosmic perceptions, new christianity, hot lines to the creative principle, and so forth.

write me,
love,
J.D.

There's an ugly rumor floating about that we all memorize the contents of each catalog and can quote issue, chapter & verse verbatim, and I would like to take this opportunity to dispel such thoughts: WE DON'T.

Therefore, when you write a letter requesting more information on an article, please, please, triple please, tell us which page in which issue the article was printed.

Les



Does anyone know anything about recipes for eating insects?
J.D.

From Source Unknown

job skills needed in a commune earth park:

carpenter
plumber
lawyer
public liaison
doctor
dentist
farmer
mason
electrician
waste disposer
lumber cutter
fence mender
cook
weaver
spinner
tailor
leatherworker
radio technician
motor repairman
blacksmith
toolmaker
refrigerationist
librarian
printer
basketer
welder
potter
ombudsman
keeper of the fire
chemist
hydroponist
beekeeper
accredited teacher
artist-craftsman
musician
story teller
welldigger

HAM COM NET

We didn't get a great deal of response from the 'Electronics' rap Fred & I laid out in the March Catalog, so maybe we're climbing the wrong tree. Maybe Electronics freaks and Catalog freaks are mutually exclusive categories. But the responses we did get all concerned short-wave radio, so we're gonna push the 'communications network' idea a little further.

We'll attempt to compile a list of Ham radio operators and electronics buffs who are willing to make their time and skills available to all and sundry in furtherance of such a communications network.

Probably the most useful function of this network would be as an information retrieval system: say you need to know how to build a sheepherder wagon, or where to get an electric mimeo machine cheap – you contact the network member nearest you who gets on the air and broadcasts your appeal. Other network members relay the appeal around the country (world) until someone with the info is found. Fast, cheap, effective. But then, the most useful function of a system quite often evolves after the system is set up and may be totally unforeseen by its originators.

So what you do is tell us who you are and where you're at (physically), your call letters, and the bands you operate on (and any other pertinent info such as special skills, usual hours you're on the air, what you are/are not willing to do, etc.

And what we do is collate all this information and make it available either by publishing it in the Catalog or some other appropriate medium, enabling the members of the network to get together and work out the details by themselves.

Plug into the network by filling out the form below. Be the first on your block.

Les

HAM COM NET
c/o Whole Earth Catalog
558 Santa Cruz Avenue
Menlo Park, CA 94025

NAME _____

ADDRESS _____

CITY/STATE _____

ZIP _____

I am a ham, and I want to be part of this. My call sign is _____ *Rating* _____ *(Novice, etc.)*

I operate on the following bands _____

_____

I am not a ham, but I want to plug in, anyway. I have the following skills, knowledge, energy to offer: _____

_____

I don't want to plug in, but I want to kibbitz. Here is my response:

Get lost! The idea stinks. ☐
Good idea. I'll watch from afar. ☐
Impossible, unworkable, and not useful anyway. ☐
Yes, No, Maybe, I donno. ☐

I don't like checking boxes, I want to tell you in my own words. _____

_____

_____

_____

_____

AND FURTHERMORE, _____

_____

_____

FILL FORM OUT AND MAIL TODAY!

Out Loud

earth resources: women

we need to talk about one of the earths greatest unused resources — women. our talents and abilities have lain untapped for centuries, and there is a great need of them now. we need to involve everyone in the survival game on the most intimate levels possible. spaceship earth badly needs new pilots, as many as it can get; and women must be allowed to participate beyond the stewardess level. the creation of alternative life styles must include new patterns in the man-woman relationship. we would like to open up a dialogue in future $1 catalogs, with women, and about women. we would like to hear from women in the outlaw areas, women participating in any kind of communal living scene. most communes i've come into contact with seem to be set up on very patriarchal lines, with women in traditional roles of housewifery and babycare. are there communes where women can freely choose to go out and build domes if they wish to, instead of cooking and changing diapers? are there any matriarchies? let us hear from you.

pam smith

Introducing: Divine Right's Chick, Estelle

At dawn Estelle went to the big rock across the creek at the edge of the campground to do the Sun Salutation. The rock was about the size of their van, and flat on top, with a big black swastika some drunk had painted on the side. The night before, she and Divine Right had lain on it smoking dope and looking at the stars. But D.R. had been in a mood, he hadn't liked it much. He said the rock was too much like a burned-out star for him, too cold and hard. It reminded him of himself too much, it got in the way of his high. D.R. likely would have launched into a heavy monologue about the constellations if Estelle hadn't said honey why don't we leave and come back in the morning. D.R. said okay. But at dawn he was too sleepy to get up, so Estelle went to the rock by herself and got ready to do the Sun Salutation. Carefully she spread her Mexican serape on the flat surface. Then she took off the shirt she'd slept in and stood there naked, looking at the serape, trying to breathe according to its colors. She breathed red and orange and blue and yellow, and then all four at once in a rapid bellows breath. Finally she closed her eyes and folded her hands before her in an attitude of prayer. Inhaling deeply, she lifted her arms and bent backwards. As she stretched, a fantastic movie began to play behind her eyes, a brilliant panoramic shot in technicolor in which a group of silent Indians floated by on feathered horses, while in the distance a wheatfield became a golden wing and flew away. Estelle smiled and bent forward to touch her toes. The colors changed when she bent over. They turned to charcoal streaked with black, and as the landscape of her mind changed a new character came into the scene, a fat Outdoorsman in a light blue pickup truck with a trailbike mounted on the front, a camper rig on top and a fourteen foot motorboat following along behind. Estelle saw him out of the corner of her eye but she didn't interrupt her movement. Her rhythm flowed on like music, her body was conducted by the sun. She would finish in a minute. After her breathing exercises and maybe some chanting, if the Outdoorsman was still there, she'd acknowledge him, she'd be friendly. Maybe he was a secret philosopher who could teach her something. Maybe he was a narc who'd bust her and D.R. both. Maybe he was Jesus. Maybe he was God. If he was God, maybe for breakfast conversation she could lay on him her flash that what stars are is salt shook from the cosmic shaker, blown wild by a devilish wind. Maybe this man was the devil. Sweet fat face, sitting in his camper, look at his crewcut, look at his tattoo, look at all those guns. Look at him look at me looking at the sun. Oh, sweet girl, let him look and let him see, we're both just creatures of a public campground, starting out a brand new day. He is he and I am me, and see the golden wheatfield fly up to the sun.

Gurney Norman

Women as Artists

The probability of being both a "whole woman" and an artist is small. The probability of being a whole woman and a would-be artist is small; the obstructions are more impressive than the literal ones that discourage talented young men (increasingly contemptuous American attitudes toward artists, the difficulty of making a living thereby, etc.).

That there seems to be a kind of Gardol shield between women and a confident world where inspiration might be materialized, leads in the heart of even the staunchest young woman to the "Goddamn-it-why-AREN'T-there-any-women-composers?!" kind of apostasy.

Women have made pretty good novelists, and it isn't hard to guess that the particular awareness on which novels in our tradition trade is one that is encouraged in women, to some degree: a wife, for instance, is expected to be more sensitive to the feelings of a couple's friends than is her husband, it's she who writes Thank You notes and makes apologies and is privy to marital secrets. The sensibilities of the traditional novel aren't all that different from those to which an educated wife-and-mother is typically exhorted.

But if writing well (lord, writing at all) demands truthfulness, for whatever limited and unrecognized time, it isn't likely that women would undertake it, since so many women, even those with something to say, are unwilling to deal with the truths of their own lives, are unwilling to wound their men's belief in women's utter dependence on them for ideas and inspiration.

The possibility is that many women are not only fearful and insecure about their own talents, no matter how real they sometimes seem, are not only unlikely to have much time and energy to spare, but are as well in an imaginative state, a perceptual state remote from that required to direct fantasy into artifact; it's been suggested that the numerous conflicting duties of a whole woman have confused and fractured a whole imagination, and have made every private creative minute a source of guilt. Many of the women I've talked with about these ideas end up looking alike — shaking their heads desperately as if they could jolt all those fragments into place and get it on, if only the task of reconstructing a randomized imagination were not so huge.

Clearly one thing that might help is if we could be our own audience for a while. We would be interested in any thoughts women readers, especially artists or would-be artists, have on these things. If you have any writing or drawing or photography or babbling that you haven't shown around, or even stuff you have shown around, we'd be interested in seeing it, with an eye to some future gathering of materials into a publication.

Cia Holdorf

"The quickest way to have a revolution is to stop buying."

(a grayhaired lady flying over the Rockies)

To a barely post-adolescent girl, well-schooled in the fine old American art of acquisition — a blasphemy. To a slightly older female struggling to become a free and whole human woman in a horrifyingly shattered and inhuman society — a revolutionary jolt to our consciousness.

To be unloaded of the compulsion to buy and to collect, to be free to make or trade only those thing which are truly essential to the support and preservation of life and spirit — just think of what that means:

For the freeing of women: Like smoking, buying can be, for women especially, a compulsive and destructive activity which we use to keep ourselves from dealing with our real needs. Some items like food and a minimum of clothing, are necessities. But then come the tempting chameleon of fashion layouts, household furnishings and decorative stuff, and all the elaborate so-called labor-saving devices. Even the counter-culture has a prodigious pile of far-out things because they are "fun" to buy. We women are the main money-spenders. Bound in our minds as tightly as a Chinese virgin's feet, we smother ourselves with shoddy soul-killing plastic planned-obsolescence. Titillation & ersatz fulfillment become ways to fill up the boring days of wife-and-motherhood. STOP. Imagine never going inside a shopping center again. Imagine not being preyed upon by obscene Madison Avenue vultures. STOP believing in so-called labor saving, and STOP believing that you are necessarily bound to have things in order to be a real and vital person. Go backpacking just once and learn the joy of living in the world with just what you need. We must learn to tell the difference between what we want (gimme) and what we need (life). It is time for us as women together, to start finding new ways to order our lives and to use the time, energy and spirit once submerged in maintaining elaborate & wasteful households. Learn to make, learn to do, learn to be.

For the freeing of society: When people stop using money and possession of material goods as a means of oppressing other people, we can begin to rebuild a society of free men and women. STOP supporting private ownership by buying unneeded and unwanted junk. STOP being acquisitive.

For the good of the earth: Our greed and insecurity are ruining our beautiful planet-home. We must begin learning how to live with fewer things for fewer people. STOP killing the earth by consuming.

For you: Returning to the pioneer days, doing-it-yourself-the-hard-way, renouncing technology would mean that life, especially for women, would be incredibly hard. The idea of working all the time just to stay alive is contrary to the idea of freeing women so that they can be creative and whole. One alternative to slowing down the destruction of the earth without our reversion to fulltime skullery-maids is the pooling of necessary and useful tools, of time, of energy. Another alternative is to become craftsmen again — make what we need, make it beautifully and in that way reconnect ourselves to real parts of our lives. Have good fantasies and START using them. There must be hundreds of ways, alternatives to playing the role of woman-as-consumer. Please share your ideas with us. Let's help each other out from under the mountains of lipstick and TV sets and washing machines and back into the air. START.

Terri Gunesch
and Caroline Green

Send your reaction, letters, articles or contributions in any form about women to Pam Smith, in care of the Whole Earth Catalog, 558 Santa Cruz Avenue, Menlo Park, California 94025.

Shel's Notes from Alternative Media Conference

Consciousness & Technology are the same.

It's this too much going on that's brought the awareness.

Anybody can take over the castle at any moment.

The chaos that we're heading for now is going to be extremely ugly.

I used to be into scientific research; I found that that was too slow, so I got into psychic research & combined it with scientific research.

Words have gotten us to where we are now, somehow.

Wow, I could never give you a hot dog—that's suicide for me.

You mean there are no non-capitalistic radio stations in the whole U. S. of A.?

Is Monday going to be Monday? Why is Monday Monday? Why do we need Wednesday?

If you, the people who receive books from us, would send back the jiffy bags, we could use them again, and perhaps even again.

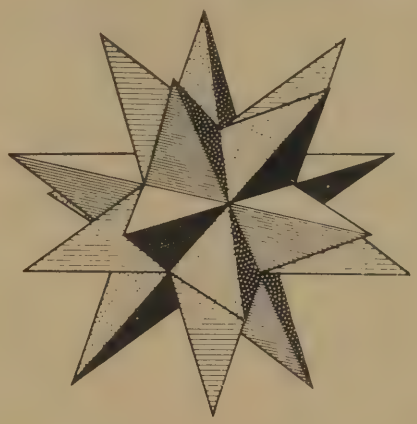
Great Stellated Dodecahedron

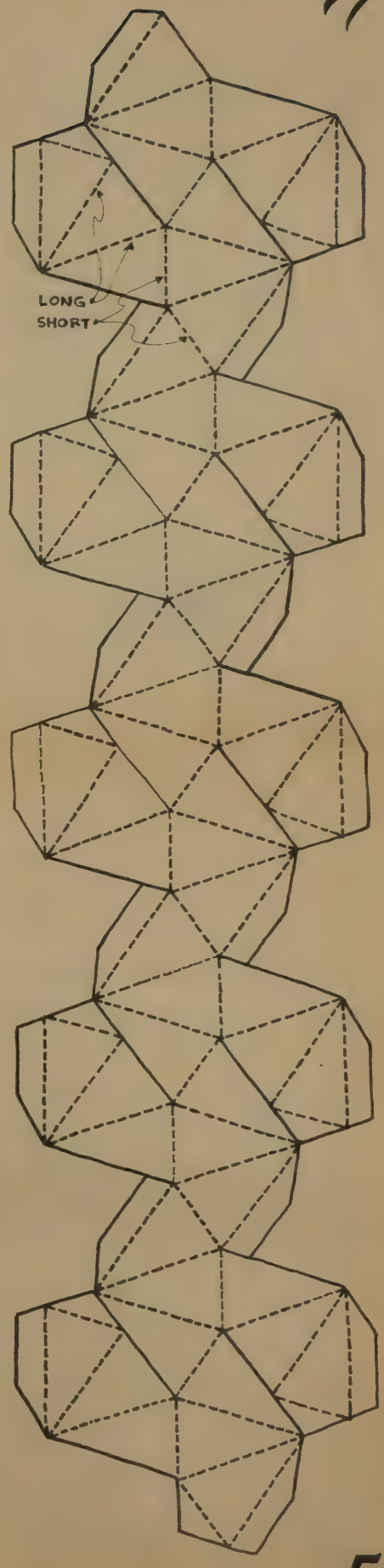
Cut along solid lines. Fold in along long dotted lines. Fold out along short dotted lines.

Use this pattern as an inspiration — the paper is too thin for construction.

The triangles are 72° – 36° – 72°, the tips of pentagrams.

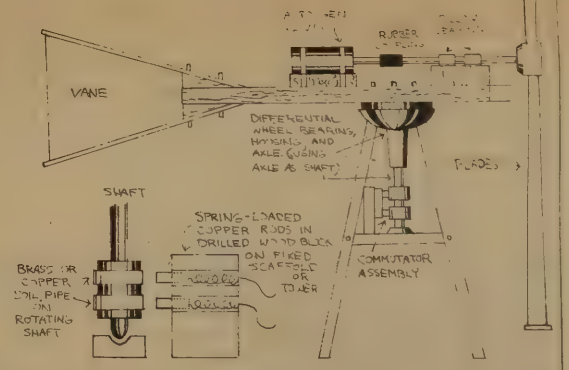
Shel Kaphan
Whole Earth Truck Store





LAST MINUTE ITEM ABOUT WIND GENERATOR

More information and details about this are being requested. Possibly in next Catalog — Ed.



What do you do with 27 imitation Japanese Zeros left over from an old World War II movie?

True ☐
False ☐
None of these ☐

Answer: None of these

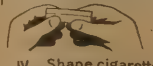
Steamboat & Hal

How to Roll a Cigarette

I. In fingers of left hand hold cigarette paper curved to receive tobacco. Pour right quantity of "Bull" Durham out of sack with right hand strewing evenly in paper.

II. Then place your two thumbs together in middle of paper thus.

III. Roll cigarette on lower fingers so index fingers move up and thumbs move down. With thumbs gently but firmly force edge of paper over tobacco and



IV. Shape cigarette by rolling with thumbs, as you draw them apart

V. Hold the cigarette in your right hand, and

VI. Moisten the projecting edge of paper

VII. With fingers close ends of cigarette by twisting paper and you have a cigarette properly made, properly shaped and ready to smoke.

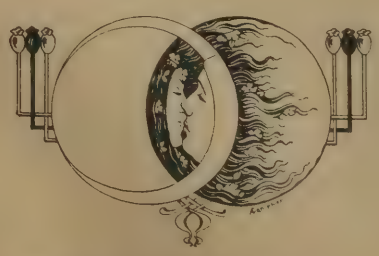
Thanks to Bull Durham and Riz La +

Steamboat

If there is no longer anything
where one has to go,
return brings good fortune.

If there is still something
where one has to go,
haste brings good fortune.

I Ching



good night all. g'70

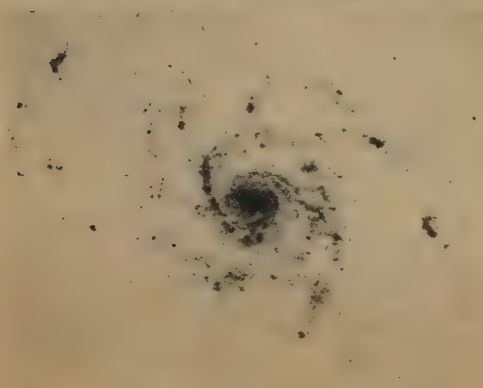
Diana,

Some probably well-meaning fink stole the "Weird File" and has just mailed it to me under the misimpression that the Realist would do a horrible expose of you all.

But Steart Brand is a friend (even when the w is missing) and besides there's nothing negative to review. I'll send back the stuff as soon as I find a large enough envelope, having just moved . . . to the West Village in New York as the first step to moving to the West Coast as soon as possible.

by the way and incidentally, I fell in love with you after reading your response about the women's lib misunderstanding, except that ideally there would be no separation so that, in bed, on some level of consciousness, your, uh, partner would be aware of your sparkling intellect, just as, in a conversation, he, or she, or whatever, would have the advantage of an extra dimension of sexuality to your ideas. this has been a cross-country sermonette.

Paul Krassner



Here are a few questions which may be answered by the use of the logarithmic spiral:

1. *Why is Pluto slightly out of line from the other planets?*
2. *Suppose, hypothetically, that there are two more asteroid belts. Where would they be located?*
3. *Why is the North Pole an ocean, and the South Pole a continent?*
4. *Why have most great thinkers and cultures grown in the Northern Hemisphere?*
5. *Why are the continents triangles which point southward?*
6. *Why are older (Population II) stars located towards the center of galaxies?*
7. *Why is iron magnetic?*
8. *Why does the number seven recur throughout nature?*
9. *Why do snowflakes have six sides?*
10. *Why is water transparent? Why does it expand as it freezes?*
11. *Why does it seem that everyone is going in different directions when everyone is actually going in the same one direction?*
12. *In order to arrange a spirallic chart of the elements, which ones would you place on the periphery and which in the center: the heavy (radioactive) elements or the light elements?*
13. *Why did science fail to detect the spiral until now?*
14. *If our universe is expanding, what are the ones next to us doing?*

STAFF *complaints*

Dear WEC fans:

We're getting tired of those regular 6¢ postage stamps. How about putting something special on? – Bernie

Complaint to GEORGE who keeps on putting complaints in the completed orders box. – Bernie – not to mention the foreign subs., too!

Upon opening the mail – don't tear the pretty stamps. – Bernie

Why am I the only one complaining? Everyone complains; no one argues with a wall, though. – Bernie

No one seems to appreciate the gears in their watch.

The Why not put us out of business even tho it may be illegal in some states and might get your local business community pissed off at us, you and yours Department

1. *A retail business license is cheap.*
2. *Membership in the American Booksellers Association is $25 for the first year – you get a book of addresses of publisher/participants & the discounts offered and some other stuff that you'll find out about if you do it.*
3. *Between 4–6 people you can come up with enough bread for an order to a company – since you have a retail license they'll sell to you – mostly at 20% to 40% discount.*
4. *You can apply this idea to other needed things (like at produce docks near big cities you can get incredible bargains on food if you buy in large enough quantities; 20–30 people each with 5–10 dollars would be more than enough).*

And to those of you who are already in the book business:

Does your mass distributor server

Does your mass distributor serve your needs?

Does he have what you want or would he rather stock a drug store?

Does he give you 30% discount and charge extra for delivery?

Why not order direct?

Why not get what you want at 40% discount?

Why do some firms refuse to fill orders from small bookstores?

It just doesn't seem to comply with fair trade laws.

We're tired of poor service at poor prices.

What have your experiences been?

Have you any suggestions or solutions to offer?

Laura

Buying wholesale is a thing lots of people can do IF it is gone about correctly. Wholesalers are interested in making a profit, as are retailers. Keep this in mind when approaching a wholesaler. Show him how he can make money by selling to you at wholesale (like, you'll go elsewhere if he doesn't). Often, a courtesy discount is given to legitimate non-profit (that means recognized by the state and Federal tax men) organizations. Courtesy discounts are usually offered only by retail establishments. They sell to you at the wholesale price and often make no money on the transaction.

Wholesalers are able to sell at lower markups and still make money by keeping down bookwork and unnecessary stock handling. That means they want to sell in quantity. So get your friends together and make up as big a list as possible. And be prepared to pay cash.

Don't expect dealer service from wholesalers. You haven't paid for it and if you ask for it, you probably won't ever be able to buy wholesale there ar
be able to buy wholesale there again. Don't ask to examine everything. They can't afford to let you.

Some wholesalers will sell only to persons or firms having a resale tax license (State Board of Equalization in California). This usually requires posting a good sized bond ($50 minimum) to assure that you will pay sales tax on everything you buy. These wholesalers don't want the bookwork involved in sales tax, so they sell nothing that they will have to charge tax on.

Often, after meeting all of the above basic requirements, you still can't buy wholesale from some sources. At this point a "front" letterhead helps. Better get a city business license or DBA (Doing Business As) and stay out of trouble. These are usually free or cheap.

Buying food wholesale is more difficult. Because the markup is very low. Sometimes a store will give you a speacial
Buying food wholesale is ve
Buying food wholesale is more difficult, because the markup is very low. Sometimes a store will give you a special price if you buy by the case. Or buy direct from the farmer at the same price you would pay in the store. Get fresher produce and let the grower have the profit. He needs it.

Most of all, remember to show the wholesaler that he will make a profit by selling to you. That's usually all you need.

Fred

further corrections

Spring 1970 Catalog

Plants and Gardens **p. 34**

Yearly rate is **$3.00** *(quarterly) or* **$5.00** *for two years.*

from:
Brooklyn Botanic Garden
1000 Washington Avenue
Brooklyn, N.Y. 11225

Wind Mills **p. 38**

Correct address:

Airmotor
Div. of Braden-Aermotor Corp.
800 E. Dallas
Broken Arrow, Oklahoma 74012

Teg's 1994 **p. 98**

is available for

$3.50 postpaid

from:
MediaMerchant
McLuhanware
34 Lambert Street
Roxbury, Massachusetts 02119

MediaMerchant *specializes in Media Hardware and offers 35 to 40% off audiotape, videotape, and records; and 10% off on paperbacks, postpaid.*

Fall 1969 Catalog

Thinking About Using Pot

is now available (for **$1.00** *) from:*

San Francisco Psychiatric Medical Clinic
2633 E. 27th Street
Oakland, CA 94601

Worm Track

In the March $1 Catalog *on p. 33 we printed an excerpt from a leaflet about worms from* Mill Creek Ranch *(in Noel, Missouri 64854). They've since informed us that although the leaflet,* **Mighty Earthworm – Soil TNT!**, *is still available for 25¢, they haven't dealed worms since 1968.*

A list of worm breeders (compiled from the back pages of Organic Gardening and Farming:

HILLAIRE, Northville, Michigan 48167

BRAZOS BAIT FARMS, Rt. 9, Waco, Texas 76705

ANDRE PEOPLES, R.D. #1, Lansdale, Pennsylvania 19446

RICHARD's WORM HATCHERY & RABBITRY, Box 168C, Parkin, Arkansas 72373

SUNADA, Box 362, Parlier, California 93648

BRONWOOD WORM GARDENS, Bronwood, Georgia 31726

GEORGIA WORM FARMS, Dawson, Georgia 31742

Business

Production Costs

Printing and Binding	$4450
Salaries	2875
Composer	300
Film and Photo Paper	200
Other Supplies	120
Rent	200
Telephone	50
Mailing and Postage	600

Total: $8795 (not including research)

55,000 copies printed July 1970

Unit cost almost 16¢

Latest offer for the last CATALOG

The last WHOLE EARTH CATALOG, to be published by us in June 1971, will be a 3-400 page perfect-bound opus of all we know — the best of our listings covered in depth, the cream from the $1 Catalogs, and possibly some fiction. In other words, the book that our periodical has been preparation for.

We are presently hearing bids from various publishing houses for distribution rights on the last CATALOG. The most recent and tempting, from Lippincott, reads:

This letter will confirm in general the main facets of the arrangement Lippincott is prepared to make for rights to distribute the autumn 1970 **Whole Earth Catalog**, Last Catalog and Supplements.

Lippincott will remit to you 73.6% on gross sales receipts up to $350,000.

75.6% of gross sales receipts from +350,000 to $500,000.

77.6% of gross sales receipts from $500,000 to $650,000.

79.6% thereafter.

A charge of 22.3% will be collected by Lippincott on gross returns to cover our costs of processing, shipping and billing.

Reports of sales and payments by us will be made to you on the 20th of each month covering sales during the month preceeding. Payments for each month's sales would be made over a four month period 40% falling due on the first payment, 25% on the next, 25% the next and 10% the next.

We can offer you an advance of $25,000 against your share of the gross sales receipts payable in installments related to your cash needs for editorial and production expenses.

Although we understand your intention to discontinue publishing the **Whole Earth Catalog**, if you change your plans and go on publishing it we wish to have the right to distribute it.

We assume that you would have complete control over the preparation of the catalog and the responsibility for its production and delivery to our warehouse.

We look forward to your decision within ten days.

If you have questions or need further clarification of any of the above, please feel free to call me collect.

Art Aveilhe

19 June 70

Got your offer. It's attractive.

Any deal we accept will need to have a larger advance.

There will not be a decision in 10 days, nor probably before December this year.

Thank you for the offer. It is under serious, if deliberate, consideration.

Steward Brand

In the Matter of
Whole Earth Catalog
558 Santa Cruz
Menlo Park, Ca 94025

PROHIBITORY ORDER NO. 5540

WHEREAS, we were furnished a mailing piece containing advertising matter which you mailed or caused to be mailed to
Mr. C.A. Bird
Route 4, Box 178-P Gainesville, Fl 32601
and

WHEREAS, said addressee has determined your advertisement to be a pandering advertisement offering for sale erotically arousing or sexually provocative matter; and

WHEREAS, said addressee has requested the issuance of an order pursuant to the provisions of Title 39, U.S. Code §4009, a copy of which law is printed on the reverse side hereof, directing you and your agents or assigns, to refrain from making any further mailings to him [and his minor children residing with him who have not attained their nineteenth birthday].

NOW, THEREFORE, pursuant to the cited statute, you, your agents and assigns, are hereby ordered:

(1) To refrain from any further mailings to the following parties at the indicated address, or intended for the indicated address by any variation of addressee designation, such as, but not limited to, occupant, householder, resident, boxholder, postal patron, rural route boxholder, and local, effective on the 30th calendar day after receipt of this order.

Clayton A. Bird
Phillip W. Bird
Susan M. Bird

(2) To immediately delete the above-named parties from all mailing lists owned or controlled by you or your agents or assigns.

(3) To immediately abstain from the sale, rental, exchange, or other transaction involving mailing lists bearing the names of the parties mentioned above.

J.E. Workman, Jr. (Postmaster)
Jacksonville, Fl 32201

Suggestions for the WHOLE EARTH CATALOG

An item is listed in the CATALOG if it is deemed:

1) Useful as a tool,
2) Relevant to independent education,
3) High quality or low cost,
4) Easily available by mail.

Please fill in as much information as you possibly can; it helps a lot.

Date_____

My name _____

Address _____

_____ ZIP

Phone _____

I SUGGEST:

Title of book or name of item: _____

_____

Author: _____

Price: _____

Publisher or supplier: _____

Address: _____

_____ ZIP

If an item suggested is intended to replace an item already in the CATALOG, please fill in the item to be replaced: _____

☐ I would like to write a review.

☐ Attached is a review of this item.

☐ I would recommend _____
(name, address, phone)

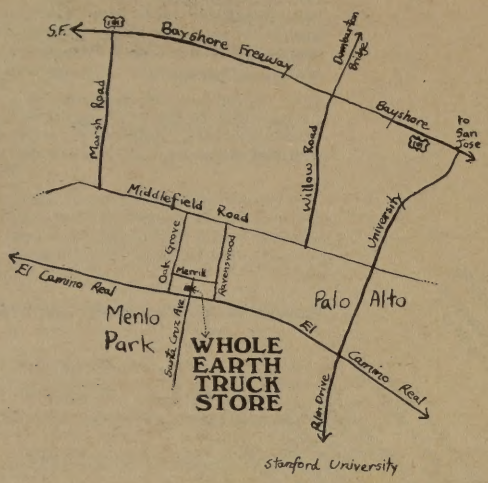
_____

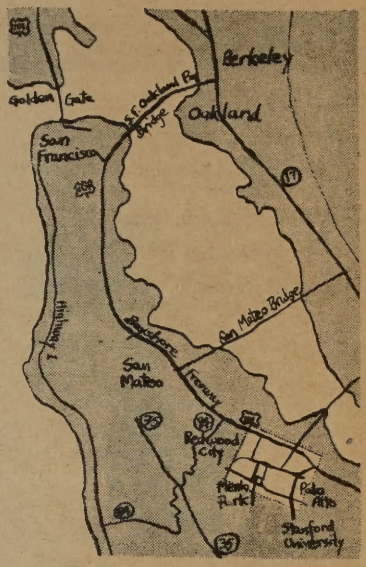
to review this item.

Additional information/review: _____

Whole Earth Truck Store

Hours: Monday—Saturday, 9 am - 6 pm
558 Santa Cruz Avenue, Menlo Park, CA 94025
Phone: (415) 323-0313





A major research source of ours is the Menlo Park Whole Earth Truck Store, which stocks most of the items in the CATALOG. We see who's buying what. We hear complaints and suggestions. We try out items that might be in the next CATALOG. We have a place where friends can come and see what's happening.

Catalog Distribution

Book People, by agreement with the Bookworks, announces national distribution of

THE WHOLE EARTH CATALOG

The Whole Earth Catalog is published six times a year—2 large ones (Spring and Fall) and 4 smaller ones. As the materials are not completely duplicated, you can carry everything in print.

Currently available:

Spring 1969 CATALOG $4
July 1969 Supplement $1
September 1969 Supplement $1
Fall 1969 CATALOG $4
January $1 Catalog
March $1 Catalog
Spring 1970 CATALOG $3
July $1 Catalog

All retail, wholesale, and library distribution is processed through Book People; please do not direct your order to Whole Earth Catalog Store.

TERMS:

Retail: 1—14 assorted 30%
15—up " 40%
Wholesale: 100 up assorted 50%
(qualification: meet the requirements of our certificate of wholesale endeavor)

Invoices are due net 10 EOM
Accounts 30 days overdue will not be shipped.
Credit accounts will be established through your Dun & Bradstreet rating, new businesses are advised to enclose their financial statement.
Returns: request label. Unauthorized returns will be discounted at a penalty.

NOTICE TO NEW ACCOUNTS:

For immediate shipments, please enclose check to cover order. Catalogs are $4.00 retail for Spring and Fall 69; $3.00 for Spring 70; $1.00 retail for the others (Jan, Mar, July, Sept). Figure your discount. Allow one pound for each catalog or each seven supplements. Figure your freight charges at Book Post rate:

12¢ first pound
6¢ each additional pound

Thank you,
Book People
2010 Seventh Street
Berkeley, CA 94710
Phone: (415) 549-3033

Note: Book People buys CATALOGS from us at 56%. So they get either 6% or 16% of the sale price. They earn it.

Subscription Form

Send to: WHOLE EARTH CATALOG
558 Santa Cruz Avenue
Menlo Park, California 94025

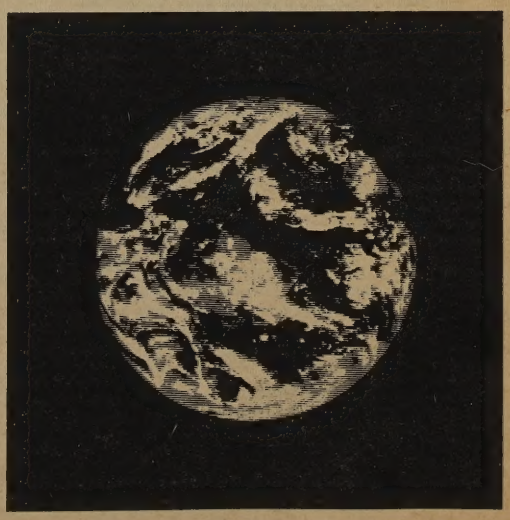
$_____ Amount enclosed

$ 3.00 ☐ One issue of 1970 Spring CATALOG
$ 4.00 ☐ One issue of 1969 Fall CATALOG ☐ 1969 Spring CATALOG
$11.25 ☐ Five copies of 1970 Spring CATALOG
$10.00 ☐ Five copies of 1969 Fall CATALOG ☐ 1969 Spring CATALOG
$ 8.00 ☐ One year subscription: six CATALOGs, two large (Fall & Spring) and four smaller.
U.S. and Canada
$9 surface elsewhere;
$14.60 air elsewhere.

starting issue: *Check one box only*
☐ 1969 Spring CATALOG ☐ 1969 July Supplement ☐ 1969 Sept. Supplement
☐ 1969 Fall CATALOG ☐ 1970 Jan. $1 Catalog ☐ 1970 March $1 Catalog
☐ 1970 Spring CATALOG ☐ 1970 July $1 Catalog

$ 7.25 ☐ Five-issue Subscription starting with 1970 September $1 Catalog

$ 25 ☐ One year Retaining Subscription
$100 ☐ One year Sustaining Subscription



_____
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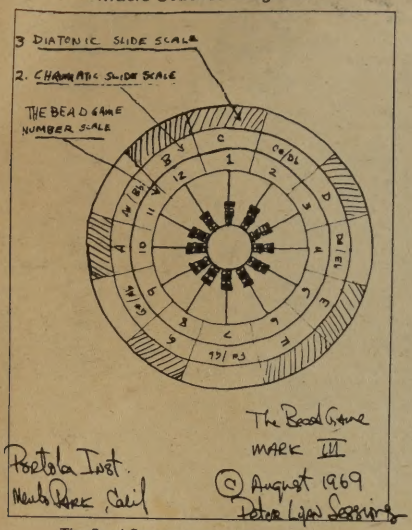
ZIP

IF YOU CHANGE YOUR ADDRESS, PLEASE TELL US. THE POST OFFICE ALMOST NEVER FORWARDS!

PORTOLA INSTITUTE
INC.
1115 MERRILL ST.
MENLO PARK,
CALIFORNIA
323-5155

Music Studies Program



The Bead Game: a composition system

The Whole Earth Catalog
is one division of
PORTOLA INSTITUTE, INC.
Other present activities
of the Institute include

Scripps Off Campus Project Center

Now let me tell you my story––once I was an aimless iconoclast roaming the streets looking for some way to express myself. Finally I was at the end of the line, nothing in sight, no hope left, despair gripped me as the neon advanced to my tortured psyche, starving, my thwarted genius shaking in a palsy, I collapsed on the street before the Scripps Off Campus Project Center (SOCP Center as it is sometimes known.)

Now I am making my movie. Everything is fine. They have supplied me with so much film and equipment. I run joyously about in a happy visionary day-dream shooting film and friends.

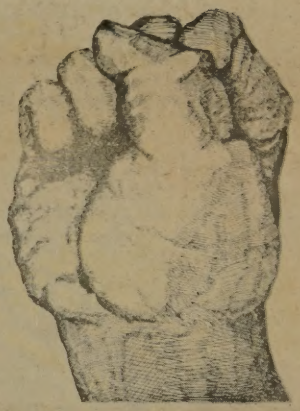
Does it sound like fun? Do you want to do it too? Stop bullshitting. You too can be a luxurious pendant on the capitalist system––and it may get you closer, yeah closer.

Facts: *The Scripps Off Campus Project Center*
540 Santa Cruz
Menlo Park 323-5155
Jim Kerr Kay Mathews
(next to the Whole Earth Truck Store)

Footnote: I neglected to mention––not just movies. In theory it says *any* project. Come in and test them. This is not science fiction.

Michael Kowalsky

Ortega Park Teachers Laboratory



Big Rock Candy Mountain

resource for our education

A LEARNING TO LEARN CATALOG:

Learning Process–––
Environmental Education–––
Home Learning–––
Classroom Materials and Methods–––
Self-Discovery–––

psychosynthesis techniques, computer symbiosis, experiential learning narratives, interaction process; school and classroom design, environmental spreading methods, films on schools, outdoor classrooms, games; toys and playthings, bioenergetics, yoga, childrearing; classroom materials, liecester materials, cardboard carpentry, teaching methods, nature labs, audio-visual aids, the bag, the box, and the bin; gurdjieff books, self-discovery, meditation texts, gestaltstuff, theater games, simulations.

Descriptions, excerpts, and evaluations.

BIG ROCK CANDY MOUNTAIN
PORTOLA INSTITUTE, INC.
1115 Merrill Street, Menlo Park, CA 94025

Summer 1969 · · · $4.00

PORTOLA INSTITUTE was established in 1966 as a nonprofit corporation to encourage, organize, and conduct innovative educational projects. The Institute relies for support on private foundations and public agencies, to whom specific project proposals are submitted.

Because Portola Institute is a private organization with no need to produce profits or guarantee "success", it can experiment with new and unusual educational projects that would be difficult to administer within more structured organizations. For this reason the staff and facilities of the Institute are deliberately kept small and flexible.

Within its framework a wide variety of projects dealing with innovative education can be created as people with ideas are able to interest people with funds. New projects are always being considered, both within the existing divisions and programs, and within as yet unexplored realms of the learning experience.

Portola Institute, Inc.
1115 Merrill Street
Menlo Park, CA
94025

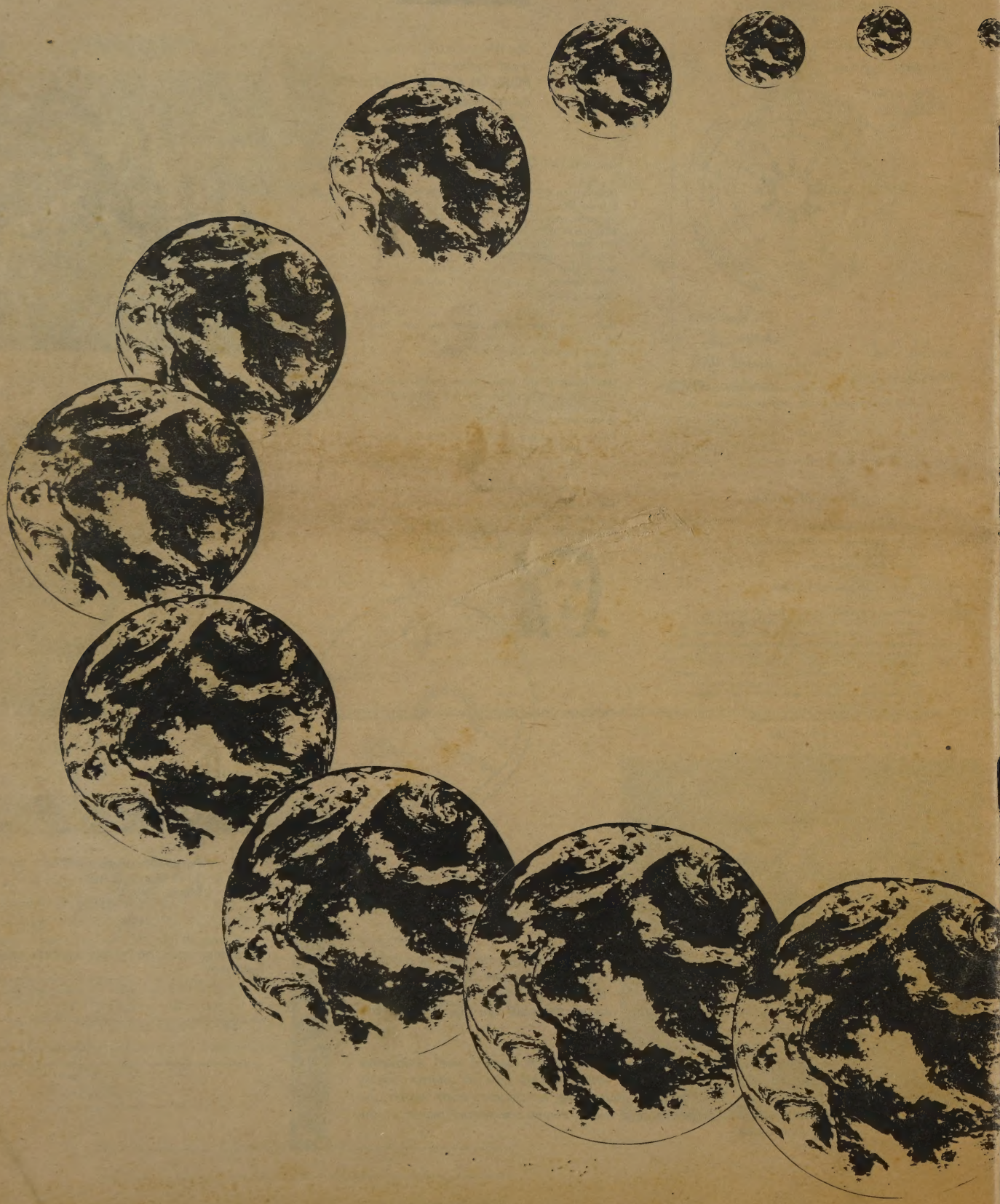
More information on Portola Institute, please.
Especially ----------.

_____

_____

_____

zip

WHOLE EARTH CATALOG
558 Santa Cruz Avenue
Menlo Park, CA 94025

SECOND CLASS
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MENLO PARK, CA